

Former Landfill Site, Brockhampton West, Harts Farm Way, Havant Highways England Response

205465/N07

Introduction

1. Vectos have been appointed Clowes Development (UK) Ltd to provide traffic and transport advice regarding the proposed development on the Former Landfill Site, Brockhampton West, Harts Farm Way, Havant.
2. The site is located immediately to the south east of the A27 / Harts Farm Way teardrop junction and is bound by the A27 to the north, Harts Farm Way to the south and west and a river to the east.
3. The site is allocated for employment use under Policy HB2 (BD11) of the adopted Havant Borough Local Plan (Allocations) Development Plan Document.
4. As part of the outline planning application, in agreement with Highways England (HE) and Hampshire County Council (HCC), Vectos used the approved LinSig models (from App Ref: AAP/18/00450: Land at Forty Acres Farm, Havant Road, Havant) for the Rusty Cutter and Teardrop junctions. It should be noted Vectos made no changes to the models for the outline planning application as it was our understanding these models had been reviewed, agreed and approved as part of the Forty Acres development. Vectos updated these models with the development flows for the former landfill site. Following their submission, HE has reviewed the models and have provided comments on the LinSig modelling.
5. This note addresses their concerns and aims to agree the modelling results and the impact on the junctions for the outline planning application. HE comments are provided at **Appendix A** for reference.

Junction Model Review

6. The updated modelling outputs are included at **Appendix B**.

Rusty Cutter

7. At paragraph 2.3 of HE the consultation response, it requests that lanes on Arms 1, 6 and 8 are amended to ensure it is inline with the approved model. These amendments have been undertaken and the updated results do not change the conclusions drawn within the submitted Transport Assessment.

Teardrop

8. Paragraph 2.11 of HE consultation response request several changes to the model including lane connectors, intergreens, give-way parameters, saturation flow and lane details. These are addressed below.
9. With regard to the lane details the following amendments have been made to the model:
 - Arm 2 (A27 W/B Off Slip) – Two lane section measured from a desktop review at 393m. The lanes have been resorted within the model to 345m (60pcu) the default value.
 - All other lanes – The lane lengths were at their default value of 345m. These are all ‘free flowing’ links so the lane lengths do not impact the results or how the LinSig model operates. However, to comply with the comments these have been changed to 1pcu.
10. The lanes connectors comments are addressed as follows:
 - In LinSig you can select to input the link length and cruise speed and it will calculate cruise time or you can select cruise time. In all instances in the approved model, cruise time has been inputted and link length and speed are ignored. In light of the comments on lane connectors, all the link lengths have been reset to measurements based on GoogleEarth and used a default cruise speed of 35kph.
 - At Arm 2 (Lane 1) to Arm 6 (Lane 2) we have not added a lane connector as from a review of the junctions using GoogleEarth it is evident this is an unlikely route for vehicles to take as its on the outside lane of a bend and narrows to a single lane after the flare has ended.
11. HE requested a reasoning as to why the intergreen C to B had been set as zero, as stated at the start of the note, Vectos did not amend the model as it was issued as an agreed/approved model by both HCC and HE. We have, however, amended the model for C to B to have an intergreen of 6 seconds.
12. HE requested a reasoning as to why Arm 1 (A27 Link Road) has the maximum flow while giving way has been set to 2532 pcu/hr. Similarly, to the point on intergreens, Vectos did not amend the model as it is an approved/agreed model.
13. To calculate the give-way parameter within the approved model, it is anticipated that an ARCADY measurement was used to derive the giveaway parameter which they have used for these two lanes together. The usual approach where there are two lanes, is to divide the calculated giveaway parameters by 2. In light of this, we have undertaken a modelling exercise applying this approach i.e. divided the giveaway parameter by 2. A brief summary of the 2025 Baseline scenario results is provided in **Table 1** below.

Table 1: A27 / Harts Farm Way (Teardrop) Roundabout Modelling Results (2025 Base + Committed + 40 Acres)

Lane	AM Peak		PM Peak	
	Deg Sat	MMQ	Deg Sat	MMQ
2016 Observed Traffic Flows				
A27 SB Link Road - left turn	81.5	2.2	87.1	3.2
A27 SB Link Road - ahead	118.2	190.9 (+138.9)	55.5	0.6
A27 WB Off Slip - Lanes 1/2	78.1	8.5	71.7	6.3
A27 WB Off Slip Lane 3	75.5	7.9	69.3	5.9
Harts Farm Way	22.3	0.8	77.3	6.3
Circ (East) Lane 1	60.7	6.3	29.2	2.0
Circ (East) Lanes 2/3	69.0	6.2	51.6	3.7
	Cycle Time: 51 seconds		Cycle Time: 43 seconds	
	PRC: -36.9		PRC: 2.9	

14. As shown in **Table 1**, if this approach is applied to the A27 SB Link Road, it results in significant queueing on this arm, which as discussed below, does not reflect reality. The model outputs can be viewed at **Appendix C**.
15. In light of this, Vectos undertook a site visit to establish observations of the Link Road. Our observations provided anecdotal evidence that the queue forecasted by the LinSig model is unrealistic and therefore the correction to the model does reflect reality.
16. To ensure our anecdotal evidence was supported by traffic surveys, we obtained the queue surveys used to prepare the approved traffic model from PBA. These are summarised in the **Table 2** below for the A27 Link Road, with the full traffic surveys shown at **Appendix D**. It is clear from these queue surveys the queue forecasted in the revised LinSig is unrealistic and does not reflect how this link operates in reality.

Table 2: Forty Acres Traffic Survey Queue Data

Time Period	Average Queue Length
08:00 – 09:00	0
17:00-18:00	0

17. Furthermore, Vectos consulted the modelling outputs submitted under the Forty Acres application when the model was approved. An extract is shown at **Figure 1** below and the full note/output is shown at **Appendix D** for reference. The results show a 1.3 pcu mean max queue at the Link Road.

Figure 2: Extract from Forty Acres Modelling Output

	AM Peak		PM Peak	
	Degree of Saturation	Mean Max Queue	Degree of Saturation	Mean Max Queue
To/From Rusty Cutter	72.3%	1.3	44.5%	0.4
A27 East	89.9%	11.8	56.8%	5.2
Harts Farm Way	32.4%	0.2	83.1%	5.1
Circulatory southbound	69.5%	6.5	61.0%	3.8

Table 6: LinSig Modelling Results

	AM Peak		PM Peak	
	Modelling Queue	Observed Queue	Modelling Queue	Observed Queue
To/From Rusty Cutter	1.3	0	0.4	0
A27 East	11.8	12.7	5.2	5.4
Harts Farm Way	0.2	0.3	5.1	3.3
Circulatory southbound	6.5	N/A	3.8	N/A

Table 7: Model Validation

18. In light of the above, the Teardrop traffic model has been amended to address the comments noted above. However, the give-way parameter for the A27 Link Road included within the approved model has been retained as it is considered that this parameter results in a traffic model, which reflects the arms' operation.
19. It is considered that the traffic modelling presented at **Appendix B** provides an accurate representation of the Teardrop junctions operation and the likely impact of the proposed development.
20. The traffic modelling results (**Appendix B**) show that the traffic associated with the proposed development results in only a negligible increase in queuing at the junction. It is therefore deemed that the development traffic would have a minimal impact on the operation of the Teardrop roundabout.

Summary and Conclusion

Summary

21. Vectos have been appointed Clowes Development (UK) Ltd to provide traffic and transport advice regarding the proposed development on the Former Landfill Site, Brockhampton West, Harts Farm Way, Havant.
22. This note addresses the concerns raised by Highways England regarding the traffic modelling for the Rusty Cutter and Teardrop junctions undertaken as part of the submitted Transport Assessment.
23. Queries raised regarding the Rusty Cutter roundabout have been addressed and the traffic model has been amended to reflect these comments. The revised modelling results does not materially change the results of the modelling presented as part of the submitted Transport Assessment.
24. Vectos have revised the traffic model in line with the comments raised regarding the Teardrop junction except for the A27 Link Road.
25. The evidence presented within this Note demonstrates that the A27 Link Road operates with no queuing during the peak periods. The observed operation of this arm was reflected in the approved traffic model and the modelling results presented in the submitted Transport Assessment in support of the proposed development.
26. As shown in Table 1, revising the give-way parameters for the A27 Link Road results in significant queueing on this arm. As such, the model does not reflect reality. In this context, it is considered that the traffic modelling presented at **Appendix B** provides an accurate representation of the Teardrop junctions operation and the likely impact of the proposed development.
27. The traffic modelling results demonstrate that the proposed development will result in only a minor increase in queuing at both the Teardrop and Rusty Cutter roundabouts.

Conclusion

28. It is therefore concluded that the proposed development would not result in a severe or material impact in transport terms. As such, there are no transport reasons why the proposed development cannot come forward and be granted planning permission.

APPENDIX A

TECHNICAL NOTE 1

DATE:	20 July 2021	CONFIDENTIALITY:	Public
SUBJECT:	Harts Farm Way, Havant - SRN Junction Model Review		
PROJECT:	Highways England Spatial Planning	AUTHOR:	Sarah Thomas
CHECKED:	Zoe Townend	APPROVED:	Glen Strongitharm

1 INTRODUCTION

- 1.1 This Technical Note (TN) provides a summary of the Harts Farm Way junction model review undertaken.
- 1.2 The following junction models have been reviewed:
 - Rusty Cutter Roundabout and
 - A27 / Harts Farm Way (Teardrop Roundabout).
- 1.3 The traffic flows have been taken from Appendix K of the Harts Farm Way Planning Application Transport Assessment.
- 1.4 No queue data was provided by the applicant, and it has therefore not been possible to compare the modelled queues with any observed queue data.
- 1.5 The traffic impact assessment has been based on the following scenarios:
 - **2016 Observed Traffic Flows** (using survey data obtained from the consented application (app ref: AAP/18/00450: Land at Forty Acres Farm, Havant Road, Havant);
 - **2020 Base**;
 - **2020 Base + Development**;
 - **2025 Future Year**;
 - **2025 Future Year + Development**;
 - **2030 Future Year**;
 - **2030 Future Year + Development**.

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2 JUNCTION MODEL REVIEW

Rusty Cutter Roundabout Junction - Existing Junction Model

- 2.1 The Rusty Cutter roundabout junction has been set up as a partially signal-controlled roundabout in LinSig. The roundabout has signals operating on the A3(M) southbound off-slip, A3(M) northbound off-slip and the south and north circulatory sections, with the remaining arms operating as give-way movements.
- 2.2 The traffic flows have been entered in pcus, and Custom Delay Based Assignment has been used to assign the flows.
- 2.3 The following changes are required to the model to ensure that it is in keeping with the previously accepted model:
- Arm 1 - Both lanes. Lane lengths to be amended from 339.3m to 345m.
 - Arm 6 - All lanes. Lane lengths to be amended from 86.8m to 90m.
 - Arm 8 - All lanes. Lane lengths to be amended from 145.4m to 150m.
- 2.4 The capacity results by arm are provided in [Table 1](#).

Table 1 Rusty Cutter Roundabout: LinSig Capacity Results

Scenario	Arm	AM Peak		PM Peak	
		Max. Degree Sat (%)	Max. MMQ	Max. Degree Sat (%)	Max. MMQ
2016 Observed	A3 NB Off-slip	76.4%	12.6	73.8%	9.3
	Circulatory South	73.7%	10.5	73.6%	11.3
	A2030 Havant Road	48.1%	2.1	51.6%	2.4
	A3 SB Off-slip	75.8%	9.3	76.8%	8.5
	Circulatory North	64.8%	6.9	74.8%	8.5
	Bedhampton Hill	48.2%	2.2	37.5%	2.3
	A27 Link	53.9%	0.7	65.1%	2.0
2020 Base	A3 NB Off-slip	79.0%	13.8	78.3%	10.5
	Circulatory South	81.1%	11.9	78.0%	12.5
	A2030 Havant Road	54.0%	2.8	57.8%	3.2
	A3 SB Off-slip	81.0%	10.5	81.6%	9.8
	Circulatory North	69.1%	7.8	79.5%	8.4

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Scenario	Arm	AM Peak		PM Peak	
		Max. Degree Sat (%)	Max. MMQ	Max. Degree Sat (%)	Max. MMQ
	Bedhampton Hill	55.1%	2.7	41.2%	2.6
	A27 Link	58.5%	1.3	69.8%	2.8
2020 Base + Dev	A3 NB Off-slip	83.1%	15.4	78.8%	10.6
	Circulatory South	81.8%	13.1	79.6%	12.9
	A2030 Havant Road	56.7%	2.7	59.1%	3.3
	A3 SB Off-slip	83.1%	11.2	79.7%	9.3
	Circulatory North	69.6%	9.0	83.1%	11.6
	Bedhampton Hill	59.4%	3.1	41.5%	2.6
	A27 Link	59.3%	1.5	70.4%	2.8
2025 Base	A3 NB Off-slip	84.8%	16.0	84.2%	12.1
	Circulatory South	87.0%	14.9	83.6%	14.2
	A2030 Havant Road	62.2%	3.4	66.4%	4.2
	A3 SB Off-slip	87.0%	12.6	87.5%	11.6
	Circulatory North	74.3%	9.8	85.3%	11.0
	Bedhampton Hill	64.2%	3.5	46.1%	3.0
	A27 Link	64.9%	2.4	75.6%	4.0
2025 Base + Dev	A3 NB Off-slip	89.0%	18.1	84.6%	12.2
	Circulatory South	87.4%	15.0	85.0%	14.8
	A2030 Havant Road	65.3%	3.5	67.7%	4.3
	A3 SB Off-slip	87.4%	12.8	85.4%	11.0
	Circulatory North	77.8%	10.5	89.1%	14.2
	Bedhampton Hill	69.4%	4.0	46.4%	3.0
	A27 Link	65.4%	2.4	76.9%	4.2
2030 Base	A3 NB Off-slip	88.8%	19.7	89.0%	14.1
	Circulatory South	88.8%	17.1	88.4%	16.3
	A2030 Havant Road	69.6%	4.6	74.7%	5.2
	A3 SB Off-slip	88.8%	16.3	92.5%	14.4
	Circulatory North	87.1%	13.6	90.2%	15.1
	Bedhampton Hill	73.0%	4.7	49.1%	3.8

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Scenario	Arm	AM Peak		PM Peak	
		Max. Degree Sat (%)	Max. MMQ	Max. Degree Sat (%)	Max. MMQ
	A27 Link	64.9%	3.4	81.2%	5.3
2030 Base + Dev	A3 NB Off-slip	90.0%	22.8	89.5%	14.3
	Circulatory South	89.9%	18.7	89.5%	17.1
	A2030 Havant Road	73.1%	5.5	76.2%	5.6
	A3 SB Off-slip	91.0%	21.0	92.7%	14.5
	Circulatory North	89.3%	15.7	91.2%	15.0
	Bedhampton Hill	78.9%	10.0	50.9%	3.8
	A27 Link	69.3%	3.5	82.5%	5.8

2.4 The capacity results for the junction as a whole are provided in **Table 2**.

Table 2 Rusty Cutter Roundabout: LinSig Capacity Results (Junction)

Scenario	AM Peak		PM Peak	
	PRC (%)	Delay (pcuHr)	PRC (%)	Delay (pcuHr)
2016 Observed	17.8%	36.80 pcuHr	17.3%	32.80 pcuHr
2020 Base	11.0%	43.74 pcuHr	10.3%	37.94 pcuHr
2020 Base + Dev	8.3%	46.66 pcuHr	8.3%	38.94 pcuHr
2025 Base	3.5%	52.87 pcuHr	2.9%	46.49 pcuHr
2025 Base + Dev	1.2%	57.00 pcuHr	1.0%	48.35 pcuHr
2030 Base	1.3%	66.14 pcuHr	-2.7%	58.01 pcuHr
2030 Base + Dev	-1.1%	74.55 pcuHr	-3.0%	61.01 pcuHr

2.1 2.5 **Table 1** and

3.1 **2.4** The capacity results for the junction as a whole are provided in **Table 2**.

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Table 2 show that the junction is predicted to operate within its theoretical design capacity in the 2020 Base, 2020 Base + Dev, 2025 Base, 2025 + Dev and 2030 Base scenarios during the AM peak, and across the 2020 Base, 2020 Base + Dev, 2025 Base, 2025 + Dev scenarios during the PM peak.

- 2.6 In the 2030 + Dev scenario with AM peak flows, the junction begins to operate slightly above its theoretical design capacity on the A3 SB Off-slip, with queues of 21pcus, well within the available queuing space which extends for around 1km. The junction operates at its theoretical design capacity on the A3 NB Off-slip, with queues of 22.8 pcus, which is within the available queuing space (circa 43 pcus).
- 2.7 In the 2030 + Dev scenario with PM peak flows, the junction begins to operate slightly above its theoretical design capacity on the A3 SB Off-slip, with queues of 14.5pcus, and on Circulatory north, with queues of 15pcus, within the available queuing space (26pcus). The junction operates just under its theoretical design capacity on the A3 NB Off-slip, with queues of 14.3 pcus, which is within the available queuing space (circa 43 pcus).
- 2.8 As stated in paragraphs 2.3, a number of items require amending in the model, and the capacity results will need to be reviewed again once these changes have been made.

A27 / Harts Farm Way (Teardrop) Roundabout Junction - Existing Junction Model

- 2.9 The A27 / Harts Farm Way (Teardrop) roundabout junction has been set up as a partially signal-controlled dumbbell roundabout in LinSig. The A27 off-slip and A27 circulatory arms are signalised, with the remaining arms operating as give-way movements. This junction is located around 300m south of the Rusty Cutter roundabout junction.
- 2.10 The traffic flows have been entered in pcus, and Custom Delay Based Assignment has been used to assign the flows.
- 2.11 The following items in the model require attention:

Lane Connectors:

- The following lane connectors have link cruise speeds considerably higher than the default value of 35km/h and require amendment.
- Arm 2 (Lanes 2 and 3) to Arm 7 (Both lanes). The link cruise speed is set to 248km/h.
- Arm 7 (Both lanes) to Arm 8 (Both lanes). The link cruise speed is set to 248km/h.
- Arm 3 (Both lanes) to Arm 8 (Both lanes). The link cruise speed is set to 248km/h.
- Arm 1 (Lane 2) to Arm 13. The link cruise speed is set to 248km/h.

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- Lane connector should be added from Arm 2 (Lane 1) to Arm 6 (Lane 2).

Intergreens:

- The intergreen for Phase C to B is currently set at 0. Reasoning for the use of this value should be provided.

Give-way Parameters:

- On Arm 1 (A27 Link Road), the maximum flow while giving way has been set at 2532 pcu/hr. Reasoning for the use of this value should be provided.

Sat. flow data:

- Arm 1 (A27 Link Road) - Lane 1. The lane width is set at 5.0m. A plan showing the measurement should be provided.

Lane Details:

- Arm 2 (A27 WB Off-slip). Two lane section has been set at 470m long, which appears to be an overestimate. A plan showing the measurement should be provided.
- Arm 4 (Circ (East) 1) - Lane 2. Lane length has been left at the default value of 345m. A plan showing the correct measurement should be provided.
- Arm 7 (Circ (South)) - Both lanes. Lane lengths have been left at the default value of 345m. A plan showing the correct measurement should be provided.
- Arm 8 (Circ (West) 2) - Both lanes. Lane lengths have been left at the default value of 345m. A plan showing the correct measurement should be provided.
- Arm 10 (Circ (West) 1). Lane length has been left at the default value of 345m. A plan showing the correct measurement should be provided.
- Arm 11 (Circ (North)). Lane length has been left at the default value of 345m. A plan showing the correct measurement should be provided.
- Arm 13 (Circ (East) 2). Lane length has been left at the default value of 345m. A plan showing the correct measurement should be provided.

2.12 All of the above items require amending in the model.

2.13 The capacity results are provided in Table 3 ~~Table 3~~.

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Table 3 A27 Teardrop Junction: LinSig Capacity Results

4.1 Scenario	Arm	AM Peak		PM Peak	
		Max. Degree Sat (%)	Max. MMQ	Max. Degree Sat (%)	Max. MMQ
2016 Observed	A27 Link Road	72.3%	1.3	46.1%	0.4
	A27 WB Off-Slip	77.5%	9.0	63.2%	5.6
	Circulatory (East)	77.0%	7.6	49.8%	3.3
	Harts Farm Way	23.7%	0.7	66.3%	3.5
2020 Base	A27 Link Road	77.1%	1.7	48.9%	0.5
	A27 WB Off-Slip	79.0%	9.3	63.6%	5.5
	Circulatory (East)	81.2%	8.9	50.4%	3.4
	Harts Farm Way	21.8%	0.7	72.0%	5.1
2020 Base + Dev	A27 Link Road	81.9%	2.2	48.9%	0.5
	A27 WB Off-Slip	79.8%	9.2	65.9%	5.6
	Circulatory (East)	82.9%	9.7	48.3%	3.3
	Harts Farm Way	26.3%	0.6	77.4%	6.2
2025 Base	A27 Link Road	82.9%	2.4	52.5%	0.6
	A27 WB Off-Slip	82.1%	9.9	69.2%	6.2
	Circulatory (East)	83.2%	9.8	51.3%	3.5
	Harts Farm Way	34.8%	0.4	76.9%	6.3
2025 Base + Dev	A27 Link Road	87.7%	3.5	52.5%	0.6
	A27 WB Off-Slip	82.1%	9.9	72.2%	6.4
	Circulatory (East)	87.4%	11.8	49.2%	3.4
	Harts Farm Way	37.7%	0.4	83.4%	7.0
2030 Base	A27 Link Road	87.6%	3.4	55.5%	0.6
	A27 WB Off-Slip	83.9%	10.3	60.6%	5.4
	Circulatory (East)	86.9%	11.4	62.9%	4.4
	Harts Farm Way	41.1%	0.4	87.7%	7.4

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4.1 Scenario	Arm	AM Peak		PM Peak	
		Max. Degree Sat (%)	Max. MMQ	Max. Degree Sat (%)	Max. MMQ
2030 Base + Dev	A27 Link Road	92.4%	5.6	55.5%	0.6
	A27 WB Off-Slip	85.5%	10.5	63.2%	6.0
	Circulatory (East)	88.2%	12.7	67.3%	4.8
	Harts Farm Way	45.4%	0.4	88.7%	9.2

Table 4 A27 Teardrop Junction: LinSig Capacity Results (Junction)

Scenario	AM Peak		PM Peak	
	PRC (%)	Delay (pcuHr)	PRC (%)	Delay (pcuHr)
2016 Observed	16.2%	14.54 pcuHr	35.7%	7.79 pcuHr
2020 Base	10.9%	16.64 pcuHr	25.0%	8.85 pcuHr
2020 Base + Dev	8.6%	18.26 pcuHr	16.3%	9.47 pcuHr
2025 Base	8.2%	19.51 pcuHr	17.1%	10.68 pcuHr
2025 Base + Dev	2.6%	22.73 pcuHr	7.9%	11.67 pcuHr
2030 Base	2.7%	23.24 pcuHr	2.6%	11.83 pcuHr
2030 Base + Dev	-2.7%	27.34 pcuHr	-1.4%	13.11 pcuHr

2.14 **Table 3 A27 Teardrop Junction: LinSig Capacity Results** Table 3 and Table 4 shows that the junction is predicted to operate within its theoretical design capacity in the 2020 Base, 2020 Base + Dev, 2025 Base, 2025 + Dev and 2030 Base scenarios during the AM peak, and across all scenarios during the PM peak. In the 2030 + Dev scenario with AM peak flows, the junction begins to operate slightly above its theoretical design capacity on the A27 Link Road, with queues of 5.6 pcus, within the available queuing space (circa 49pcus). During the 2030 Base + Dev scenarios, queuing on the A27 WB Off-slip reaches 10.5 pcus in the AM peak and 6.0 pcus in the PM peak, well within the queuing space available (circa 87 pcus).

2.15 As stated in paragraph 2.11, a number of items require amending in the model, and the capacity results will need to be reviewed again once these changes have been made.

Primary Site Access - Proposed junction model

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- 2.16 The primary site access is to be taken from Harts Farm Way. The junction modelling undertaken shows that the proposed junction operates well within capacity and does not show any queuing back onto the A27.

Summary of existing junction models

- 2.17 A summary of the existing junction model review is as follows:
- **A3(M) Rusty Cutter Roundabout Junction:** Changes to lane lengths required. The model should be modified accordingly.
 - **A27 / Harts Farm Way (Teardrop) Roundabout Junction:** A number of items need to be updated in the model. The model should be modified accordingly.

3 CONCLUSIONS

- 3.1 This Technical Note (TN) provides a summary of the review undertaken. **Table 5** sets out whether the junction models are considered fit for purpose and also whether the junction operates within capacity.

Table 5 Junction Review Summary

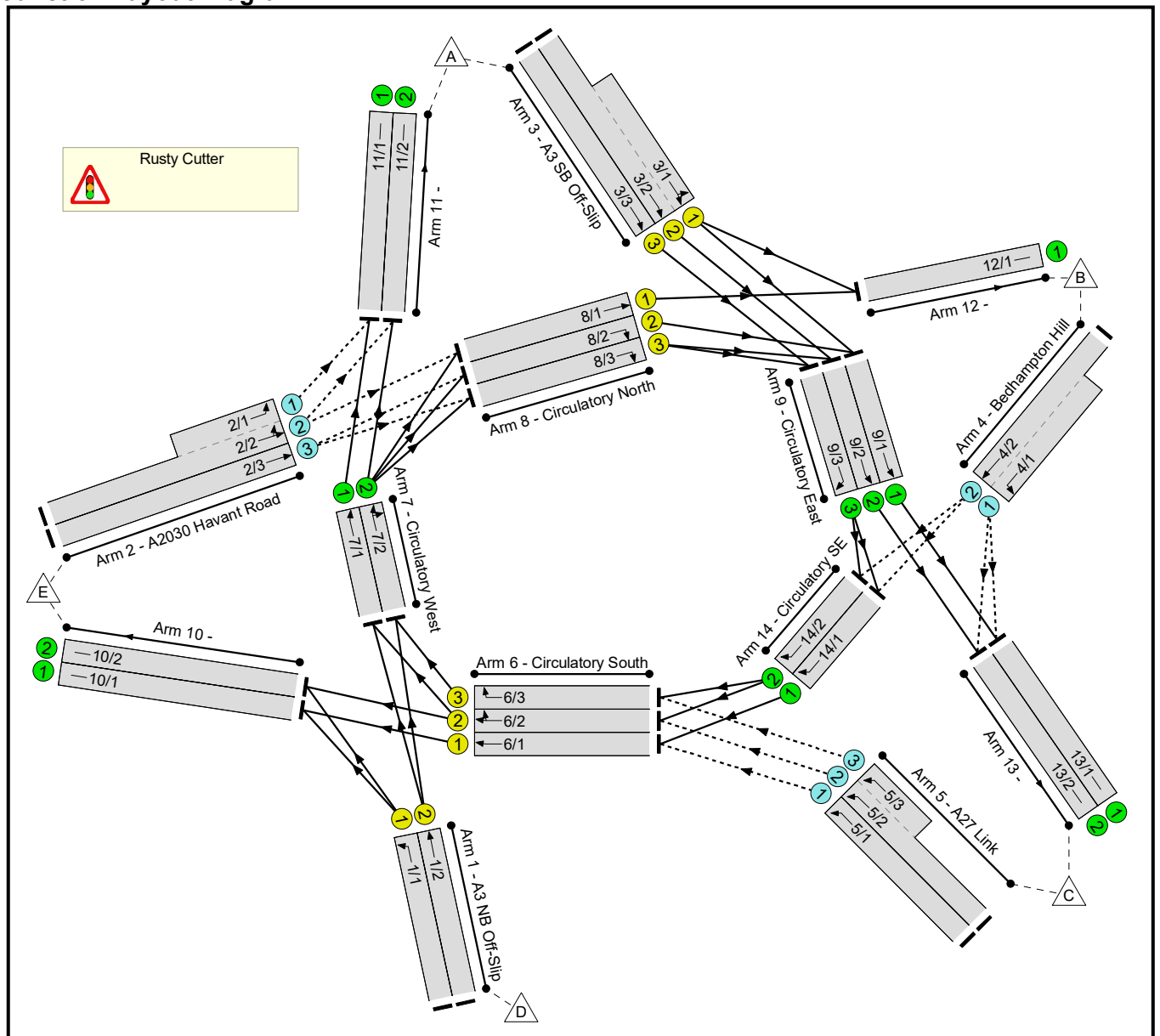
5.1 Junction	Junction Model Review	
	Fit for Purpose?	Operates within capacity?
Rusty Cutter Roundabout Junction	X	✓
A27 / Harts Farm Way (Teardrop) Roundabout Junction	X	✓

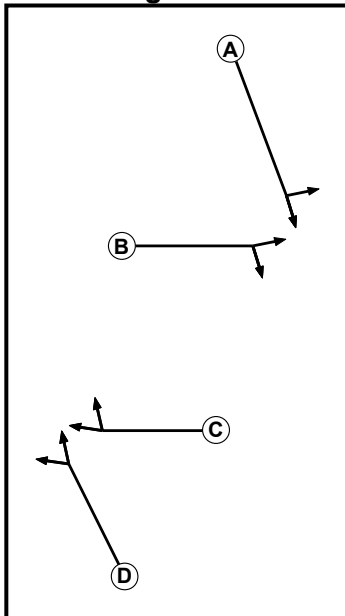
- 3.2 **Table 5** shows that both of the junction models require some sort of amendment before they can be considered fit for purpose. Both of the junctions operate within capacity, although this may change following the required modification of the models.

APPENDIX B

User and Project Details

Project:	Harts Farm Way
Title:	Rusty Cutter Roundabout
Design Layout Ref:	Existing Junction Layout - AM Model
Additional detail:	PBA Approved Model
File name:	Rusty Cutter v11.4 - Approved Model - AM.lsg3x
Author:	David Noyce
Company:	Vectos (South) Ltd
Address:	Network Building, 97 Tottenham Court Road, London W1T 4TP

Junction Layout Diagram

Phase Diagram**Phase Input Data**

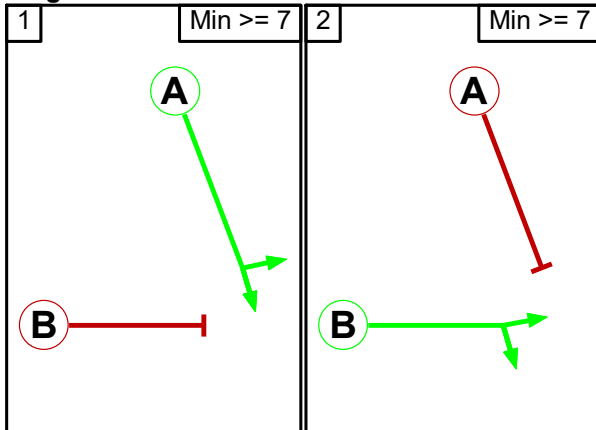
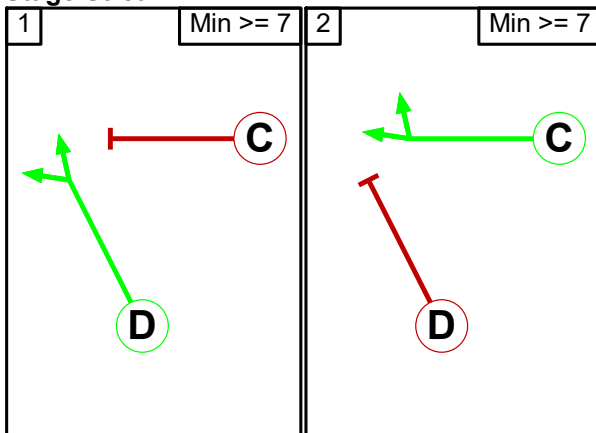
Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	1		7	7
B	Traffic	1		7	7
C	Traffic	2		7	7
D	Traffic	2		7	7

Intergreens

		Starting Phase				
			A	B	C	D
Terminating Phase	A		7	-	-	
	B	7		-	-	
	C	-	-		7	
	D	-	-	7		

Stage Data

Stream	Stage No.	Phases in Stage
1	1	A
1	2	B
2	1	D
2	2	C

Stage Diagrams**Stage Stream: 1****Stage Stream: 2****Phase Delays****Stage Stream: 1**

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Stage Stream: 2

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Lane Input Data

Junction: Rusty Cutter												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (A3 NB Off-Slip)	U	D	2	3	60.0	User	1950	-	-	-	-	-
1/2 (A3 NB Off-Slip)	U	D	2	3	60.0	User	1950	-	-	-	-	-
2/1 (A2030 Havant Road)	O		2	3	7.0	User	1950	-	-	-	-	-
2/2 (A2030 Havant Road)	O		2	3	60.0	User	1950	-	-	-	-	-
2/3 (A2030 Havant Road)	O		2	3	60.0	User	1950	-	-	-	-	-
3/1 (A3 SB Off-Slip)	U	A	2	3	9.6	User	1950	-	-	-	-	-
3/2 (A3 SB Off-Slip)	U	A	2	3	76.5	User	1950	-	-	-	-	-
3/3 (A3 SB Off-Slip)	U	A	2	3	76.5	User	1950	-	-	-	-	-
4/1 (Bedhampton Hill)	O		2	3	12.5	User	1950	-	-	-	-	-
4/2 (Bedhampton Hill)	O		2	3	60.0	User	1950	-	-	-	-	-
5/1 (A27 Link)	O		2	3	42.6	User	1950	-	-	-	-	-
5/2 (A27 Link)	O		2	3	7.0	User	1950	-	-	-	-	-
5/3 (A27 Link)	O		2	3	5.2	User	1950	-	-	-	-	-
6/1 (Circulatory South)	U	C	2	3	15.7	User	1950	-	-	-	-	-
6/2 (Circulatory South)	U	C	2	3	15.7	User	1950	-	-	-	-	-
6/3 (Circulatory South)	U	C	2	3	15.7	User	1950	-	-	-	-	-
7/1 (Circulatory West)	U		2	3	17.4	User	1950	-	-	-	-	-
7/2 (Circulatory West)	U		2	3	17.4	User	1950	-	-	-	-	-

8/1 (Circulatory North)	U	B	2	3	26.1	User	1950	-	-	-	-	-
8/2 (Circulatory North)	U	B	2	3	26.1	User	1950	-	-	-	-	-
8/3 (Circulatory North)	U	B	2	3	26.1	User	1950	-	-	-	-	-
9/1 (Circulatory East)	U		2	3	14.8	User	1950	-	-	-	-	-
9/2 (Circulatory East)	U		2	3	14.8	User	1950	-	-	-	-	-
9/3 (Circulatory East)	U		2	3	14.8	User	1950	-	-	-	-	-
14/1 (Circulatory SE)	U		2	3	19.1	User	1950	-	-	-	-	-
14/2 (Circulatory SE)	U		2	3	19.1	User	1950	-	-	-	-	-

Give-Way Lane Input Data

Junction: Rusty Cutter											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Block Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in IG (PCU)
2/1 (A2030 Havant Road)	11/1 (Left)	1181	0	7/1	0.34	All	-	-	-	-	-
				7/2	0.34	To 11/2 (Ahead)					
2/2 (A2030 Havant Road)	8/1 (Ahead)	1181	0	7/1	0.34	All	-	-	-	-	-
				7/2	0.34	All					
	11/2 (Left)	1181	0	7/1	0.34	All					
				7/2	0.34	To 11/2 (Ahead)					
2/3 (A2030 Havant Road)	8/2 (Ahead)	1181	0	7/1	0.34	All	-	-	-	-	-
				7/2	0.34	All					
	8/3 (Ahead)	1181	0	7/1	0.34	All					
				7/2	0.34	All					
4/1 (Bedhampton Hill)	13/1 (Left)	1448	0	9/1	0.39	All	-	-	-	-	-
				9/2	0.39	All					
	13/2 (Left)	1448	0	9/1	0.39	All					
				9/2	0.39	All					
4/2 (Bedhampton Hill)	14/1 (Ahead)	1448	0	9/1	0.39	All	-	-	-	-	-
				9/2	0.39	All					
				9/3	0.39	All					
	14/2 (Ahead)	1448	0	9/1	0.39	All					
				9/2	0.39	All					
				9/3	0.39	All					
5/1 (A27 Link)	6/1 (Ahead)	1185	0	14/1	0.39	All	-	-	-	-	-
5/2 (A27 Link)	6/2 (Ahead)	1185	0	14/1	0.39	All	-	-	-	-	-
				14/2	0.39	To 6/2 (Right)					
5/3 (A27 Link)	6/3 (Ahead)	1185	0	14/1	0.39	All	-	-	-	-	-
				14/2	0.39	All					

Lane Connector Input Data

Junction: Rusty Cutter				
Org Lane	Dest Lane	Junction	Mean Cruise Time	Platoon Dispersion
1/1	10/1	Internal	5	35
1/1	10/2	Internal	5	35
1/2	7/1	Internal	8	35
1/2	7/2	Internal	8	35
2/1	11/1	Internal	5	35
2/2	8/1	Internal	10	35
2/2	11/2	Internal	5	35
2/3	8/2	Internal	10	35
2/3	8/3	Internal	10	35
3/1	9/1	Internal	7	35
3/1	12/1	Internal	5	35
3/2	9/2	Internal	7	35
3/3	9/3	Internal	7	35
4/1	13/1	Internal	5	35
4/1	13/2	Internal	5	35
4/2	14/1	Internal	5	35
4/2	14/2	Internal	5	35
5/1	6/1	Internal	5	35
5/2	6/2	Internal	5	35
5/3	6/3	Internal	5	35
6/1	10/1	Internal	5	35
6/2	7/1	Internal	8	35
6/2	10/2	Internal	5	35
6/3	7/2	Internal	8	35
7/1	11/1	Internal	5	35
7/2	8/1	Internal	10	35
7/2	8/2	Internal	10	35
7/2	8/3	Internal	10	35
7/2	11/2	Internal	5	35
8/1	12/1	Internal	5	35
8/2	9/1	Internal	7	35
8/3	9/2	Internal	7	35
8/3	9/3	Internal	7	35
9/1	13/1	Internal	5	35
9/2	13/2	Internal	5	35
9/3	14/1	Internal	5	35
9/3	14/2	Internal	5	35
14/1	6/1	Internal	5	35

14/2	6/2	Internal	5	35
14/2	6/3	Internal	5	35

Scenario 1: '2016 Base, AM'

(FG1: '2016 Base, AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	56	1027	0	342	1425
	B	51	0	353	0	215	619
	C	773	35	0	0	240	1048
	D	2	171	489	0	39	701
	E	311	233	319	0	0	863
	Tot.	1137	495	2188	0	836	4656

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	34	24
Change Point	13	54

Stage Stream: 2

Stage	1	2
Duration	31	27
Change Point	42	8

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	76.4%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	76.4%	-	-
1/1	A3 NB Off-Slip Left	D	31	49	8	39	1950	867	4.5%	13.6	0.5
1/2	A3 NB Off-Slip Ahead	D	31	49	8	662	1950	867	76.4%	25.5	12.6
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	544	1950:1950	675+900	37.6 : 32.2%	2.2	1.4
2/3	A2030 Havant Road Ahead	-	-	-	-	319	1950	664	48.1%	6.0	2.1
3/2+3/1	A3 SB Off-Slip Ahead Left	A	34	20	54	1083	1950:1950	708+720	75.9 : 75.9%	18.3	9.3
3/3	A3 SB Off-Slip Ahead	A	34	20	54	342	1950	948	36.1%	14.5	4.5
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	619	1950:1950	660+732	40.3 : 48.2%	4.0	2.2
5/1	A27 Link Ahead	-	-	-	-	233	1950	1060	22.0%	2.2	0.1
5/2+5/3	A27 Link Ahead	-	-	-	-	815	1950:1950	564+948	53.9 : 53.9%	2.6	0.7
6/1	Circulatory South Ahead	C	27	15	42	554	1950	758	73.1%	29.8	9.8
6/2	Circulatory South Right Ahead	C	27	15	42	559	1950	758	73.7%	29.4	10.3
6/3	Circulatory South Right	C	27	15	42	543	1950	758	71.6%	26.9	10.5
7/1	Circulatory West Ahead	-	-	-	-	318	1950	1950	16.3%	1.1	0.1
7/2	Circulatory West Right Ahead	-	-	-	-	1203	1950	1950	61.7%	2.4	0.8
8/1	Circulatory North Ahead	B	24	61	13	439	1950	677	64.8%	23.8	6.9
8/2	Circulatory North Right	B	24	61	13	406	1950	677	60.0%	20.5	4.8
8/3	Circulatory North Right	B	24	61	13	402	1950	677	59.4%	20.4	4.8
9/1	Circulatory East Ahead	-	-	-	-	896	1950	1950	45.9%	1.7	0.4
9/2	Circulatory East Ahead	-	-	-	-	939	1950	1950	48.2%	1.8	0.5
9/3	Circulatory East Right	-	-	-	-	342	1950	1950	17.5%	1.1	0.1
14/1	Circulatory SE Right	-	-	-	-	321	1950	1950	16.5%	1.1	0.1
14/2	Circulatory SE Right	-	-	-	-	287	1950	1950	14.7%	1.1	0.1
C1	Stream: 1	PRC for Signalled Lanes (%):		18.6	Total Delay for Signalled Lanes (pcuHr):			14.39	Cycle Time (s): 72		
C1	Stream: 2	PRC for Signalled Lanes (%):		17.8	Total Delay for Signalled Lanes (pcuHr):			18.05	Cycle Time (s): 72		
		PRC Over All Lanes (%):		17.8	Total Delay Over All Lanes(pcuHr):			36.80			

Scenario 3: '2025 Base + Comm + 40 Acres, AM'

(FG3: '2025 Base + Comm + 40 Acres, AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	64	1178	0	405	1647
	B	58	0	405	0	250	713
	C	887	40	0	0	284	1211
	D	2	196	560	0	62	820
	E	391	274	439	0	0	1104
	Tot.	1338	574	2582	0	1001	5495

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	34	24
Change Point	26	67

Stage Stream: 2

Stage	1	2
Duration	31	27
Change Point	44	10

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	87.5%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	87.5%	-	-
1/1	A3 NB Off-Slip Left	D	31	51	10	62	1950	867	7.2%	13.8	0.7
1/2	A3 NB Off-Slip Ahead	D	31	51	10	758	1950	867	87.5%	33.8	17.0
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	665	1950:1950	605+783	51.1 : 45.5%	3.3	2.5
2/3	A2030 Havant Road Ahead	-	-	-	-	439	1950	588	74.6%	13.8	5.1
3/2+3/1	A3 SB Off-Slip Ahead Left	A	34	33	67	1242	1950:1950	706+720	87.1 : 87.1%	23.4	12.7
3/3	A3 SB Off-Slip Ahead	A	34	33	67	405	1950	948	42.7%	15.3	5.5
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	713	1950:1950	530+603	58.2 : 67.1%	8.9	3.8
5/1	A27 Link Ahead	-	-	-	-	215	1950	1019	21.1%	2.2	0.1
5/2+5/3	A27 Link Ahead	-	-	-	-	996	1950:1950	596+907	66.3 : 66.3%	3.6	2.6
6/1	Circulatory South Ahead	C	27	17	44	639	1950	758	84.3%	41.1	14.3
6/2	Circulatory South Right Ahead	C	27	17	44	647	1950	758	85.3%	38.6	14.5
6/3	Circulatory South Right	C	27	17	44	638	1950	758	84.1%	34.1	14.0
7/1	Circulatory West Ahead	-	-	-	-	349	1950	1950	17.9%	1.1	0.1
7/2	Circulatory West Right Ahead	-	-	-	-	1394	1950	1950	71.5%	3.2	1.2
8/1	Circulatory North Ahead	B	24	2	26	510	1950	677	75.3%	25.6	9.9
8/2	Circulatory North Right	B	24	2	26	500	1950	677	73.8%	20.5	9.1
8/3	Circulatory North Right	B	24	2	26	499	1950	677	73.7%	20.4	9.0
9/1	Circulatory East Ahead	-	-	-	-	1063	1950	1950	54.5%	2.0	0.6
9/2	Circulatory East Ahead	-	-	-	-	1114	1950	1950	57.1%	2.1	0.7
9/3	Circulatory East Right	-	-	-	-	405	1950	1950	20.8%	1.2	0.1
14/1	Circulatory SE Right	-	-	-	-	424	1950	1950	21.7%	1.2	0.1
14/2	Circulatory SE Right	-	-	-	-	289	1950	1950	14.8%	1.1	0.1
C1	Stream: 1	PRC for Signalled Lanes (%):		3.4	Total Delay for Signalled Lanes (pcuHr):		19.10	Cycle Time (s):		72	
	Stream: 2	PRC for Signalled Lanes (%):		2.9	Total Delay for Signalled Lanes (pcuHr):		27.64	Cycle Time (s):		72	
		PRC Over All Lanes (%):		2.9	Total Delay Over All Lanes (pcuHr):		54.90				

Scenario 4: '2025 Base + Comm + 40 Acres + Dev (Amazon), AM'

(FG4: '2025 Base + Comm + 40 Acres + Dev (Amazon), AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	64	1197	0	405	1666
	B	58	0	414	0	250	722
	C	913	53	0	0	291	1257
	D	2	196	586	0	62	846
	E	391	274	444	0	0	1109
	Tot.	1364	587	2641	0	1008	5600

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	37	25
Change Point	19	63

Stage Stream: 2

Stage	1	2
Duration	34	28
Change Point	38	3

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	89.0%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	89.0%	-	-
1/1	A3 NB Off-Slip Left	D	34	45	3	62	1950	898	6.9%	13.6	0.8
1/2	A3 NB Off-Slip Ahead	D	34	45	3	784	1950	898	87.3%	33.4	18.1
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	665	1950:1950	578+847	51.4 : 43.5%	3.6	3.0
2/3	A2030 Havant Road Ahead	-	-	-	-	444	1950	566	78.4%	17.0	6.1
3/2+3/1	A3 SB Off-Slip Ahead Left	A	37	26	63	1261	1950:1950	707+721	88.3 : 88.3%	24.4	14.6
3/3	A3 SB Off-Slip Ahead	A	37	26	63	405	1950	975	41.5%	15.1	5.6
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	722	1950:1950	511+585	60.3 : 70.7%	10.2	4.2
5/1	A27 Link Ahead	-	-	-	-	211	1950	1010	20.9%	2.3	0.1
5/2+5/3	A27 Link Ahead	-	-	-	-	1046	1950:1950	638+907	67.7 : 67.7%	3.6	2.9
6/1	Circulatory South Ahead	C	28	10	38	658	1950	744	88.4%	48.9	16.6
6/2	Circulatory South Right Ahead	C	28	10	38	662	1950	744	89.0%	45.3	16.7
6/3	Circulatory South Right	C	28	10	38	650	1950	744	87.4%	39.4	15.8
7/1	Circulatory West Ahead	-	-	-	-	376	1950	1950	19.3%	1.1	0.1
7/2	Circulatory West Right Ahead	-	-	-	-	1432	1950	1950	73.4%	3.5	1.4
8/1	Circulatory North Ahead	B	25	70	19	523	1950	667	78.4%	29.1	11.5
8/2	Circulatory North Right	B	25	70	19	516	1950	667	77.3%	23.0	10.5
8/3	Circulatory North Right	B	25	70	19	514	1950	667	77.0%	22.8	10.5
9/1	Circulatory East Ahead	-	-	-	-	1089	1950	1950	55.8%	2.1	0.6
9/2	Circulatory East Ahead	-	-	-	-	1138	1950	1950	58.4%	2.2	0.7
9/3	Circulatory East Right	-	-	-	-	405	1950	1950	20.8%	1.2	0.1
14/1	Circulatory SE Right	-	-	-	-	447	1950	1950	22.9%	1.2	0.1
14/2	Circulatory SE Right	-	-	-	-	266	1950	1950	13.6%	1.1	0.1
C1	Stream: 1	PRC for Signalled Lanes (%):	1.9	Total Delay for Signalled Lanes (pcuHr):				21.04	Cycle Time (s): 76		
C1	Stream: 2	PRC for Signalled Lanes (%):	1.2	Total Delay for Signalled Lanes (pcuHr):				31.92	Cycle Time (s): 76		
		PRC Over All Lanes (%):	1.2	Total Delay Over All Lanes (pcuHr):				62.14			

Scenario 5: '2025 Base + Comm + 40 Acres + Dev (TNT), AM'

(FG5: '2025 Base + Comm + 40 Acres + Dev (TNT), AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	64	1191	0	405	1660
	B	58	0	411	0	250	719
	C	895	44	0	0	286	1225
	D	2	196	578	0	62	838
	E	391	274	442	0	0	1107
	Tot.	1346	578	2622	0	1003	5549

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	34	24
Change Point	23	64

Stage Stream: 2

Stage	1	2
Duration	32	26
Change Point	41	8

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	88.5%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	88.5%	-	-
1/1	A3 NB Off-Slip Left	D	32	48	8	62	1950	894	6.9%	13.1	0.7
1/2	A3 NB Off-Slip Ahead	D	32	48	8	776	1950	894	86.8%	32.1	16.9
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	665	1950:1950	594+816	51.4 : 44.1%	3.4	2.6
2/3	A2030 Havant Road Ahead	-	-	-	-	442	1950	578	76.5%	15.1	5.4
3/2+3/1	A3 SB Off-Slip Ahead Left	A	34	30	64	1255	1950:1950	707+720	88.0 : 88.0%	24.1	13.5
3/3	A3 SB Off-Slip Ahead	A	34	30	64	405	1950	948	42.7%	15.3	5.5
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	719	1950:1950	517+590	59.6 : 69.6%	9.6	3.9
5/1	A27 Link Ahead	-	-	-	-	227	1950	1021	22.2%	2.3	0.1
5/2+5/3	A27 Link Ahead	-	-	-	-	998	1950:1950	582+907	67.1 : 67.1%	3.7	2.7
6/1	Circulatory South Ahead	C	26	15	41	646	1950	731	88.3%	47.0	15.6
6/2	Circulatory South Right Ahead	C	26	15	41	647	1950	731	88.5%	44.2	15.6
6/3	Circulatory South Right	C	26	15	41	645	1950	731	88.2%	40.1	15.4
7/1	Circulatory West Ahead	-	-	-	-	354	1950	1950	18.2%	1.1	0.1
7/2	Circulatory West Right Ahead	-	-	-	-	1419	1950	1950	72.8%	3.4	1.3
8/1	Circulatory North Ahead	B	24	71	23	514	1950	677	75.9%	26.2	10.2
8/2	Circulatory North Right	B	24	71	23	510	1950	677	75.3%	21.3	9.3
8/3	Circulatory North Right	B	24	71	23	510	1950	677	75.3%	21.3	9.3
9/1	Circulatory East Ahead	-	-	-	-	1079	1950	1950	55.3%	2.1	0.6
9/2	Circulatory East Ahead	-	-	-	-	1132	1950	1950	58.1%	2.2	0.7
9/3	Circulatory East Right	-	-	-	-	405	1950	1950	20.8%	1.2	0.1
14/1	Circulatory SE Right	-	-	-	-	419	1950	1950	21.5%	1.2	0.1
14/2	Circulatory SE Right	-	-	-	-	294	1950	1950	15.1%	1.1	0.1
C1	Stream: 1	PRC for Signalled Lanes (%):		2.3	Total Delay for Signalled Lanes (pcuHr):			19.88	Cycle Time (s): 72		
C1	Stream: 2	PRC for Signalled Lanes (%):		1.7	Total Delay for Signalled Lanes (pcuHr):			30.69	Cycle Time (s): 72		
		PRC Over All Lanes (%):		1.7	Total Delay Over All Lanes(pcuHr):			59.24			

Scenario 6: '2025 Base + Comm + 40 Acres + Dev (B8), AM'

(FG6: '2025 Base + Comm + 40 Acres + Dev (B8), AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	64	1196	0	405	1665
	B	58	0	413	0	250	721
	C	894	44	0	0	286	1224
	D	2	196	584	0	62	844
	E	391	274	444	0	0	1109
	Tot.	1345	578	2637	0	1003	5563

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	34	24
Change Point	24	65

Stage Stream: 2

Stage	1	2
Duration	32	26
Change Point	42	9

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	89.0%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	89.0%	-	-
1/1	A3 NB Off-Slip Left	D	32	49	9	62	1950	894	6.9%	13.1	0.7
1/2	A3 NB Off-Slip Ahead	D	32	49	9	782	1950	894	87.5%	32.8	17.4
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	665	1950:1950	592+794	51.7 : 45.2%	3.5	2.8
2/3	A2030 Havant Road Ahead	-	-	-	-	444	1950	576	77.0%	15.5	5.5
3/2+3/1	A3 SB Off-Slip Ahead Left	A	34	31	65	1260	1950:1950	706+720	88.3 : 88.3%	24.4	13.6
3/3	A3 SB Off-Slip Ahead	A	34	31	65	405	1950	948	42.7%	15.3	5.5
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	721	1950:1950	513+586	60.0 : 70.5%	9.8	4.0
5/1	A27 Link Ahead	-	-	-	-	198	1950	1011	19.6%	2.2	0.1
5/2+5/3	A27 Link Ahead	-	-	-	-	1026	1950:1950	631+907	66.7 : 66.7%	3.5	2.7
6/1	Circulatory South Ahead	C	26	16	42	643	1950	731	87.9%	47.0	15.5
6/2	Circulatory South Right Ahead	C	26	16	42	651	1950	731	89.0%	44.5	15.8
6/3	Circulatory South Right	C	26	16	42	643	1950	731	87.9%	39.7	15.1
7/1	Circulatory West Ahead	-	-	-	-	355	1950	1950	18.2%	1.1	0.1
7/2	Circulatory West Right Ahead	-	-	-	-	1423	1950	1950	73.0%	3.4	1.3
8/1	Circulatory North Ahead	B	24	0	24	514	1950	677	75.9%	26.1	10.2
8/2	Circulatory North Right	B	24	0	24	515	1950	677	76.1%	21.6	9.4
8/3	Circulatory North Right	B	24	0	24	513	1950	677	75.8%	21.5	9.4
9/1	Circulatory East Ahead	-	-	-	-	1087	1950	1950	55.7%	2.1	0.6
9/2	Circulatory East Ahead	-	-	-	-	1137	1950	1950	58.3%	2.2	0.7
9/3	Circulatory East Right	-	-	-	-	405	1950	1950	20.8%	1.2	0.1
14/1	Circulatory SE Right	-	-	-	-	445	1950	1950	22.8%	1.2	0.1
14/2	Circulatory SE Right	-	-	-	-	268	1950	1950	13.7%	1.1	0.1
C1	Stream: 1	PRC for Signalled Lanes (%):		1.9	Total Delay for Signalled Lanes (pcuHr):		20.15	Cycle Time (s):		72	
C1	Stream: 2	PRC for Signalled Lanes (%):		1.1	Total Delay for Signalled Lanes (pcuHr):		30.89	Cycle Time (s):		72	
		PRC Over All Lanes (%):		1.1	Total Delay Over All Lanes (pcuHr):		59.83				

Scenario 7: '2025 Base + Comm + 40 Acres + Dev (Yodel), AM'

(FG7: '2025 Base + Comm + 40 Acres + Dev (Yodel), AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	64	1200	0	405	1669
	B	58	0	415	0	250	723
	C	908	51	0	0	290	1249
	D	2	196	589	0	62	849
	E	391	274	445	0	0	1110
	Tot.	1359	585	2649	0	1007	5600

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	34	24
Change Point	24	65

Stage Stream: 2

Stage	1	2
Duration	32	26
Change Point	42	9

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	89.8%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	89.8%	-	-
1/1	A3 NB Off-Slip Left	D	32	49	9	62	1950	894	6.9%	13.1	0.7
1/2	A3 NB Off-Slip Ahead	D	32	49	9	787	1950	894	88.1%	33.5	17.7
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	665	1950:1950	581+825	51.8 : 44.1%	3.5	2.8
2/3	A2030 Havant Road Ahead	-	-	-	-	445	1950	567	78.4%	16.8	5.8
3/2+3/1	A3 SB Off-Slip Ahead Left	A	34	31	65	1264	1950:1950	706+720	88.6 : 88.6%	24.7	14.0
3/3	A3 SB Off-Slip Ahead	A	34	31	65	405	1950	948	42.7%	15.3	5.5
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	723	1950:1950	510+582	60.4 : 71.3%	10.0	4.1
5/1	A27 Link Ahead	-	-	-	-	203	1950	1009	20.1%	2.2	0.1
5/2+5/3	A27 Link Ahead	-	-	-	-	1046	1950:1950	635+907	67.8 : 67.8%	3.7	2.9
6/1	Circulatory South Ahead	C	26	16	42	653	1950	731	89.3%	49.2	16.1
6/2	Circulatory South Right Ahead	C	26	16	42	657	1950	731	89.8%	45.9	16.2
6/3	Circulatory South Right	C	26	16	42	652	1950	731	89.2%	41.6	15.8
7/1	Circulatory West Ahead	-	-	-	-	367	1950	1950	18.8%	1.1	0.1
7/2	Circulatory West Right Ahead	-	-	-	-	1437	1950	1950	73.7%	3.5	1.4
8/1	Circulatory North Ahead	B	24	0	24	521	1950	677	76.9%	26.9	10.4
8/2	Circulatory North Right	B	24	0	24	518	1950	677	76.5%	21.7	9.7
8/3	Circulatory North Right	B	24	0	24	516	1950	677	76.2%	21.6	9.4
9/1	Circulatory East Ahead	-	-	-	-	1092	1950	1950	56.0%	2.1	0.6
9/2	Circulatory East Ahead	-	-	-	-	1142	1950	1950	58.6%	2.2	0.7
9/3	Circulatory East Right	-	-	-	-	405	1950	1950	20.8%	1.2	0.1
14/1	Circulatory SE Right	-	-	-	-	450	1950	1950	23.1%	1.2	0.1
14/2	Circulatory SE Right	-	-	-	-	263	1950	1950	13.5%	1.1	0.1
C1	Stream: 1	PRC for Signalled Lanes (%):		1.6	Total Delay for Signalled Lanes (pcuHr):		20.50	Cycle Time (s):		72	
C1	Stream: 2	PRC for Signalled Lanes (%):		0.2	Total Delay for Signalled Lanes (pcuHr):		32.39	Cycle Time (s):		72	
		PRC Over All Lanes (%):		0.2	Total Delay Over All Lanes (pcuHr):		62.02				

Scenario 8: '2025 Base + Comm + 40 Acres + Dev (Amazon wPoyle&Norwich), AM'

(FG8: '2025 Base + Comm + 40 Acres + Dev (Amazon wPoyle&Norwich), AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	64	1233	0	405	1702
	B	58	0	431	0	250	739
	C	922	57	0	0	293	1272
	D	2	196	633	0	62	893
	E	391	274	453	0	0	1118
	Tot.	1373	591	2750	0	1010	5724

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	47	27
Change Point	26	80

Stage Stream: 2

Stage	1	2
Duration	41	33
Change Point	58	18

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	89.3%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	89.3%	-	-
1/1	A3 NB Off-Slip Left	D	41	65	18	62	1950	931	6.7%	14.5	0.8
1/2	A3 NB Off-Slip Ahead	D	41	65	18	831	1950	931	89.3%	37.7	22.3
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	665	1950:1950	556+755	52.8 : 49.1%	4.9	3.9
2/3	A2030 Havant Road Ahead	-	-	-	-	453	1950	546	83.0%	22.8	9.2
3/2+3/1	A3 SB Off-Slip Ahead Left	A	47	33	80	1297	1950:1950	717+736	89.3 : 89.3%	24.8	19.0
3/3	A3 SB Off-Slip Ahead	A	47	33	80	405	1950	1064	38.1%	14.2	5.9
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	739	1950:1950	471+553	65.5 : 78.0%	14.0	9.7
5/1	A27 Link Ahead	-	-	-	-	215	1950	1008	21.3%	2.3	0.1
5/2+5/3	A27 Link Ahead	-	-	-	-	1057	1950:1950	664+907	67.3 : 67.3%	3.6	3.4
6/1	Circulatory South Ahead	C	33	25	58	669	1950	753	88.8%	45.5	15.9
6/2	Circulatory South Right Ahead	C	33	25	58	668	1950	753	88.7%	44.8	17.8
6/3	Circulatory South Right	C	33	25	58	648	1950	753	86.0%	41.6	17.7
7/1	Circulatory West Ahead	-	-	-	-	391	1950	1950	20.1%	1.2	0.1
7/2	Circulatory West Right Ahead	-	-	-	-	1477	1950	1950	75.7%	3.8	1.6
8/1	Circulatory North Ahead	B	27	87	26	527	1950	620	84.9%	40.4	14.1
8/2	Circulatory North Right	B	27	87	26	544	1950	620	87.7%	38.8	14.7
8/3	Circulatory North Right	B	27	87	26	542	1950	620	87.4%	38.3	14.6
9/1	Circulatory East Ahead	-	-	-	-	1137	1950	1950	58.3%	2.2	0.7
9/2	Circulatory East Ahead	-	-	-	-	1182	1950	1950	60.6%	2.3	0.8
9/3	Circulatory East Right	-	-	-	-	405	1950	1950	20.8%	1.2	0.1
14/1	Circulatory SE Right	-	-	-	-	454	1950	1950	23.3%	1.2	0.2
14/2	Circulatory SE Right	-	-	-	-	259	1950	1950	13.3%	1.1	0.1
C1	Stream: 1	PRC for Signalled Lanes (%):		0.8	Total Delay for Signalled Lanes (pcuHr):		28.08	Cycle Time (s):		88	
C1	Stream: 2	PRC for Signalled Lanes (%):		0.8	Total Delay for Signalled Lanes (pcuHr):		33.20	Cycle Time (s):		88	
		PRC Over All Lanes (%):		0.8	Total Delay Over All Lanes (pcuHr):		72.62				

Scenario 9: '2025 Base + Comm + 40 Acres + Dev (Amazon wPoyle&Norwich 3 Unit Test), AM'

(FG9: '2025 Base + Comm + 40 Acres + Dev (Amazon wPoyle&Norwich 3 Unit Test), AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	64	1221	0	405	1690
	B	58	0	426	0	250	734
	C	910	51	0	0	290	1251
	D	2	196	617	0	62	877
	E	391	274	450	0	0	1115
	Tot.	1361	585	2714	0	1007	5667

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	42	26
Change Point	19	68

Stage Stream: 2

Stage	1	2
Duration	38	30
Change Point	50	13

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	89.8%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	89.8%	-	-
1/1	A3 NB Off-Slip Left	D	38	57	13	62	1950	927	6.7%	13.8	0.8
1/2	A3 NB Off-Slip Ahead	D	38	57	13	815	1950	927	87.9%	34.5	19.9
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	665	1950:1950	569+793	52.2 : 46.4%	4.4	3.5
2/3	A2030 Havant Road Ahead	-	-	-	-	450	1950	557	80.8%	19.8	7.5
3/2+3/1	A3 SB Off-Slip Ahead Left	A	42	26	68	1285	1950:1950	712+729	89.2 : 89.2%	24.9	17.1
3/3	A3 SB Off-Slip Ahead	A	42	26	68	405	1950	1023	39.6%	14.6	5.8
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	734	1950:1950	484+563	63.6 : 75.7%	11.8	4.8
5/1	A27 Link Ahead	-	-	-	-	220	1950	1012	21.7%	2.3	0.1
5/2+5/3	A27 Link Ahead	-	-	-	-	1031	1950:1950	641+907	66.6 : 66.6%	3.5	2.8
6/1	Circulatory South Ahead	C	30	20	50	662	1950	737	89.8%	46.8	16.0
6/2	Circulatory South Right Ahead	C	30	20	50	661	1950	737	89.7%	45.9	17.1
6/3	Circulatory South Right	C	30	20	50	641	1950	737	87.0%	41.4	16.8
7/1	Circulatory West Ahead	-	-	-	-	380	1950	1950	19.5%	1.1	0.1
7/2	Circulatory West Right Ahead	-	-	-	-	1454	1950	1950	74.6%	3.6	1.5
8/1	Circulatory North Ahead	B	26	75	19	521	1950	642	81.1%	34.8	12.1
8/2	Circulatory North Right	B	26	75	19	534	1950	642	83.2%	32.8	12.1
8/3	Circulatory North Right	B	26	75	19	533	1950	642	83.0%	32.6	11.8
9/1	Circulatory East Ahead	-	-	-	-	1120	1950	1950	57.4%	2.2	0.7
9/2	Circulatory East Ahead	-	-	-	-	1168	1950	1950	59.9%	2.3	0.7
9/3	Circulatory East Right	-	-	-	-	405	1950	1950	20.8%	1.2	0.1
14/1	Circulatory SE Right	-	-	-	-	442	1950	1950	22.7%	1.2	0.1
14/2	Circulatory SE Right	-	-	-	-	271	1950	1950	13.9%	1.1	0.1
C1	Stream: 1	PRC for Signalled Lanes (%):		0.9	Total Delay for Signalled Lanes (pcuHr):		25.25	Cycle Time (s):		82	
C1	Stream: 2	PRC for Signalled Lanes (%):		0.2	Total Delay for Signalled Lanes (pcuHr):		32.46	Cycle Time (s):		82	
		PRC Over All Lanes (%):		0.2	Total Delay Over All Lanes (pcuHr):		67.91				

Scenario 10: '2025 Base + Comm + 40 Acres + Dev (Amazon Full Dev), AM'

(FG10: '2025 Base + Comm + 40 Acres + Dev (Amazon Full Dev), AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	64	1193	0	405	1662
	B	58	0	412	0	250	720
	C	926	59	0	0	295	1280
	D	2	196	581	0	62	841
	E	391	274	443	0	0	1108
	Tot.	1377	593	2629	0	1012	5611

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	34	24
Change Point	22	63

Stage Stream: 2

Stage	1	2
Duration	31	27
Change Point	40	6

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	89.9%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	89.9%	-	-
1/1	A3 NB Off-Slip Left	D	31	47	6	62	1950	867	7.2%	13.8	0.7
1/2	A3 NB Off-Slip Ahead	D	31	47	6	779	1950	867	89.9%	37.3	18.3
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	665	1950:1950	573+846	51.7 : 43.6%	3.6	2.9
2/3	A2030 Havant Road Ahead	-	-	-	-	443	1950	561	78.9%	17.4	5.9
3/2+3/1	A3 SB Off-Slip Ahead Left	A	34	29	63	1257	1950:1950	706+720	88.2 : 88.2%	24.3	13.5
3/3	A3 SB Off-Slip Ahead	A	34	29	63	405	1950	948	42.7%	15.3	5.5
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	720	1950:1950	515+588	59.8 : 70.1%	9.7	4.0
5/1	A27 Link Ahead	-	-	-	-	214	1950	1010	21.2%	2.3	0.1
5/2+5/3	A27 Link Ahead	-	-	-	-	1066	1950:1950	640+907	68.9 : 68.9%	3.8	3.2
6/1	Circulatory South Ahead	C	27	13	40	662	1950	758	87.3%	44.9	15.7
6/2	Circulatory South Right Ahead	C	27	13	40	670	1950	758	88.4%	42.0	15.8
6/3	Circulatory South Right	C	27	13	40	661	1950	758	87.2%	37.4	15.2
7/1	Circulatory West Ahead	-	-	-	-	384	1950	1950	19.7%	1.1	0.1
7/2	Circulatory West Right Ahead	-	-	-	-	1438	1950	1950	73.7%	3.5	1.4
8/1	Circulatory North Ahead	B	24	70	22	529	1950	677	78.1%	27.7	10.7
8/2	Circulatory North Right	B	24	70	22	513	1950	677	75.8%	21.0	9.3
8/3	Circulatory North Right	B	24	70	22	511	1950	677	75.5%	20.9	9.3
9/1	Circulatory East Ahead	-	-	-	-	1084	1950	1950	55.6%	2.1	0.6
9/2	Circulatory East Ahead	-	-	-	-	1133	1950	1950	58.1%	2.2	0.7
9/3	Circulatory East Right	-	-	-	-	405	1950	1950	20.8%	1.2	0.1
14/1	Circulatory SE Right	-	-	-	-	448	1950	1950	23.0%	1.2	0.1
14/2	Circulatory SE Right	-	-	-	-	265	1950	1950	13.6%	1.1	0.1
C1	Stream: 1	PRC for Signalled Lanes (%):		2.1	Total Delay for Signalled Lanes (pcuHr):		20.23	Cycle Time (s):		72	
C1	Stream: 2	PRC for Signalled Lanes (%):		0.1	Total Delay for Signalled Lanes (pcuHr):		31.24	Cycle Time (s):		72	
		PRC Over All Lanes (%):		0.1	Total Delay Over All Lanes (pcuHr):		60.66				

Scenario 11: '2025 Base + Comm + 40 Acres + Dev (Yodel Full Dev), AM'

(FG11: '2025 Base + Comm + 40 Acres + Dev (Yodel Full Dev), AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	64	1197	0	405	1666
	B	58	0	414	0	250	722
	C	919	56	0	0	293	1268
	D	2	196	586	0	62	846
	E	391	274	444	0	0	1109
	Tot.	1370	590	2641	0	1010	5611

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	37	25
Change Point	4	48

Stage Stream: 2

Stage	1	2
Duration	34	28
Change Point	33	74

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	89.2%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	89.2%	-	-
1/1	A3 NB Off-Slip Left	D	34	40	74	62	1950	898	6.9%	13.6	0.8
1/2	A3 NB Off-Slip Ahead	D	34	40	74	784	1950	898	87.3%	33.4	18.1
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	665	1950:1950	574+830	51.4 : 44.6%	4.0	3.3
2/3	A2030 Havant Road Ahead	-	-	-	-	444	1950	563	78.9%	17.9	6.4
3/2+3/1	A3 SB Off-Slip Ahead Left	A	37	11	48	1261	1950:1950	707+721	88.3 : 88.3%	24.4	14.6
3/3	A3 SB Off-Slip Ahead	A	37	11	48	405	1950	975	41.5%	15.1	5.6
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	722	1950:1950	509+584	60.5 : 70.9%	9.9	4.2
5/1	A27 Link Ahead	-	-	-	-	212	1950	1009	21.0%	2.3	0.1
5/2+5/3	A27 Link Ahead	-	-	-	-	1056	1950:1950	640+907	68.3 : 68.3%	3.7	3.0
6/1	Circulatory South Ahead	C	28	5	33	662	1950	744	89.0%	45.4	15.3
6/2	Circulatory South Right Ahead	C	28	5	33	664	1950	744	89.2%	43.8	16.3
6/3	Circulatory South Right	C	28	5	33	655	1950	744	88.0%	40.6	16.2
7/1	Circulatory West Ahead	-	-	-	-	380	1950	1950	19.5%	1.1	0.1
7/2	Circulatory West Right Ahead	-	-	-	-	1437	1950	1950	73.7%	3.5	1.4
8/1	Circulatory North Ahead	B	25	55	4	526	1950	667	78.8%	31.1	10.8
8/2	Circulatory North Right	B	25	55	4	516	1950	667	77.3%	27.3	9.4
8/3	Circulatory North Right	B	25	55	4	514	1950	667	77.0%	27.1	9.3
9/1	Circulatory East Ahead	-	-	-	-	1089	1950	1950	55.8%	2.1	0.6
9/2	Circulatory East Ahead	-	-	-	-	1138	1950	1950	58.4%	2.2	0.7
9/3	Circulatory East Right	-	-	-	-	405	1950	1950	20.8%	1.2	0.1
14/1	Circulatory SE Right	-	-	-	-	450	1950	1950	23.1%	1.2	0.1
14/2	Circulatory SE Right	-	-	-	-	263	1950	1950	13.5%	1.1	0.1
C1	Stream: 1	PRC for Signalled Lanes (%):		1.9	Total Delay for Signalled Lanes (pcuHr):		22.57	Cycle Time (s):		76	
C1	Stream: 2	PRC for Signalled Lanes (%):		0.9	Total Delay for Signalled Lanes (pcuHr):		31.32	Cycle Time (s):		76	
		PRC Over All Lanes (%):		0.9	Total Delay Over All Lanes (pcuHr):		63.25				

Scenario 13: '2030 Base + Comm + 40 Acres, AM'

(FG13: '2030 Base + Comm + 40 Acres, AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	68	1245	0	427	1740
	B	62	0	428	0	264	754
	C	937	42	0	0	300	1279
	D	2	207	592	0	64	865
	E	412	289	459	0	0	1160
	Tot.	1413	606	2724	0	1055	5798

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	45	25
Change Point	12	64

Stage Stream: 2

Stage	1	2
Duration	38	32
Change Point	43	4

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	89.2%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	89.2%	-	-
1/1	A3 NB Off-Slip Left	D	38	50	4	64	1950	905	7.1%	14.6	0.9
1/2	A3 NB Off-Slip Ahead	D	38	50	4	801	1950	905	88.5%	36.6	20.5
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	701	1950:1950	571+682	56.6 : 55.4%	5.3	4.0
2/3	A2030 Havant Road Ahead	-	-	-	-	459	1950	555	82.8%	21.9	8.8
3/2+3/1	A3 SB Off-Slip Ahead Left	A	45	19	64	1313	1950:1950	728+747	89.0 : 89.0%	23.6	17.5
3/3	A3 SB Off-Slip Ahead	A	45	19	64	427	1950	1068	40.0%	13.8	6.0
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	754	1950:1950	474+561	68.7 : 76.4%	13.3	9.2
5/1	A27 Link Ahead	-	-	-	-	229	1950	1008	22.7%	2.3	0.1
5/2+5/3	A27 Link Ahead	-	-	-	-	1050	1950:1950	601+891	70.4 : 70.4%	4.1	3.8
6/1	Circulatory South Ahead	C	32	11	43	683	1950	766	89.2%	45.3	16.3
6/2	Circulatory South Right Ahead	C	32	11	43	682	1950	766	89.0%	44.2	17.4
6/3	Circulatory South Right	C	32	11	43	667	1950	766	87.1%	41.0	17.8
7/1	Circulatory West Ahead	-	-	-	-	376	1950	1950	19.3%	1.1	0.1
7/2	Circulatory West Right Ahead	-	-	-	-	1466	1950	1950	75.2%	3.7	1.5
8/1	Circulatory North Ahead	B	25	71	12	538	1950	604	89.1%	46.1	15.2
8/2	Circulatory North Right	B	25	71	12	526	1950	604	87.1%	38.6	13.6
8/3	Circulatory North Right	B	25	71	12	525	1950	604	87.0%	38.4	13.5
9/1	Circulatory East Ahead	-	-	-	-	1123	1950	1950	57.6%	2.2	0.7
9/2	Circulatory East Ahead	-	-	-	-	1173	1950	1950	60.2%	2.3	0.8
9/3	Circulatory East Right	-	-	-	-	427	1950	1950	21.9%	1.2	0.1
14/1	Circulatory SE Right	-	-	-	-	454	1950	1950	23.3%	1.2	0.2
14/2	Circulatory SE Right	-	-	-	-	299	1950	1950	15.3%	1.1	0.1
C1	Stream: 1	PRC for Signalled Lanes (%):		1.0	Total Delay for Signalled Lanes (pcuHr):		28.39	Cycle Time (s):		84	
C1	Stream: 2	PRC for Signalled Lanes (%):		0.9	Total Delay for Signalled Lanes (pcuHr):		32.97	Cycle Time (s):		84	
		PRC Over All Lanes (%):		0.9	Total Delay Over All Lanes(pcuHr):		72.78				

Scenario 14: '2030 Base + Comm + 40 Acres + Dev (Amazon), AM'

(FG14: '2030 Base + Comm + 40 Acres + Dev (Amazon), AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	68	1264	0	427	1759
	B	62	0	437	0	264	763
	C	963	55	0	0	307	1325
	D	2	207	618	0	64	891
	E	412	289	465	0	0	1166
	Tot.	1439	619	2784	0	1062	5904

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	47	27
Change Point	19	73

Stage Stream: 2

Stage	1	2
Duration	40	34
Change Point	51	10

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	91.7%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	91.7%	-	-
1/1	A3 NB Off-Slip Left	D	40	58	10	64	1950	909	7.0%	15.1	0.9
1/2	A3 NB Off-Slip Ahead	D	40	58	10	827	1950	909	91.0%	41.7	23.2
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	701	1950:1950	545+703	57.8 : 54.9%	5.8	4.4
2/3	A2030 Havant Road Ahead	-	-	-	-	465	1950	532	87.3%	30.0	12.7
3/2+3/1	A3 SB Off-Slip Ahead Left	A	47	26	73	1332	1950:1950	716+736	91.7 : 91.7%	27.9	22.1
3/3	A3 SB Off-Slip Ahead	A	47	26	73	427	1950	1064	40.1%	14.5	6.4
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	763	1950:1950	456+542	71.6 : 80.7%	15.8	10.5
5/1	A27 Link Ahead	-	-	-	-	228	1950	1001	22.8%	2.3	0.1
5/2+5/3	A27 Link Ahead	-	-	-	-	1097	1950:1950	632+891	72.0 : 72.0%	4.4	4.7
6/1	Circulatory South Ahead	C	34	17	51	698	1950	776	90.0%	46.8	17.2
6/2	Circulatory South Right Ahead	C	34	17	51	698	1950	776	90.0%	46.2	18.9
6/3	Circulatory South Right	C	34	17	51	682	1950	776	87.9%	43.4	19.2
7/1	Circulatory West Ahead	-	-	-	-	400	1950	1950	20.5%	1.2	0.1
7/2	Circulatory West Right Ahead	-	-	-	-	1507	1950	1950	77.3%	4.0	1.7
8/1	Circulatory North Ahead	B	27	80	19	551	1950	620	88.8%	45.6	15.8
8/2	Circulatory North Right	B	27	80	19	542	1950	620	87.4%	38.3	14.3
8/3	Circulatory North Right	B	27	80	19	541	1950	620	87.2%	38.0	14.2
9/1	Circulatory East Ahead	-	-	-	-	1149	1950	1950	58.9%	2.2	0.7
9/2	Circulatory East Ahead	-	-	-	-	1198	1950	1950	61.4%	2.4	0.8
9/3	Circulatory East Right	-	-	-	-	427	1950	1950	21.9%	1.2	0.1
14/1	Circulatory SE Right	-	-	-	-	470	1950	1950	24.1%	1.2	0.2
14/2	Circulatory SE Right	-	-	-	-	283	1950	1950	14.5%	1.1	0.1
C1	Stream: 1	PRC for Signalled Lanes (%):	-1.9	Total Delay for Signalled Lanes (pcuHr):				30.53	Cycle Time (s): 88		
C1	Stream: 2	PRC for Signalled Lanes (%):	-1.1	Total Delay for Signalled Lanes (pcuHr):				36.09	Cycle Time (s): 88		
		PRC Over All Lanes (%):	-1.9	Total Delay Over All Lanes (pcuHr):				80.15			

Scenario 15: '2030 Base + Comm + 40 Acres + Dev (TNT), AM'

(FG15: '2030 Base + Comm + 40 Acres + Dev (TNT), AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	68	1258	0	427	1753
	B	62	0	434	0	264	760
	C	946	46	0	0	302	1294
	D	2	207	610	0	64	883
	E	412	289	463	0	0	1164
	Tot.	1422	610	2765	0	1057	5854

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	48	26
Change Point	21	76

Stage Stream: 2

Stage	1	2
Duration	40	34
Change Point	53	12

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	90.6%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	90.6%	-	-
1/1	A3 NB Off-Slip Left	D	40	60	12	64	1950	909	7.0%	15.1	0.9
1/2	A3 NB Off-Slip Ahead	D	40	60	12	819	1950	909	90.1%	40.0	22.6
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	701	1950:1950	559+681	57.2 : 55.9%	5.7	4.2
2/3	A2030 Havant Road Ahead	-	-	-	-	463	1950	544	85.1%	25.4	10.8
3/2+3/1	A3 SB Off-Slip Ahead Left	A	48	28	76	1326	1950:1950	727+747	89.9 : 89.9%	24.8	20.1
3/3	A3 SB Off-Slip Ahead	A	48	28	76	427	1950	1086	39.3%	13.8	6.1
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	760	1950:1950	460+548	70.8 : 79.2%	15.5	10.1
5/1	A27 Link Ahead	-	-	-	-	224	1950	1003	22.3%	2.3	0.1
5/2+5/3	A27 Link Ahead	-	-	-	-	1070	1950:1950	637+891	70.0 : 70.0%	4.1	4.5
6/1	Circulatory South Ahead	C	34	19	53	691	1950	776	89.1%	45.2	16.4
6/2	Circulatory South Right Ahead	C	34	19	53	690	1950	776	89.0%	44.4	18.1
6/3	Circulatory South Right	C	34	19	53	666	1950	776	85.9%	40.9	18.1
7/1	Circulatory West Ahead	-	-	-	-	390	1950	1950	20.0%	1.2	0.1
7/2	Circulatory West Right Ahead	-	-	-	-	1483	1950	1950	76.1%	3.8	1.6
8/1	Circulatory North Ahead	B	26	83	21	542	1950	598	90.6%	50.4	16.4
8/2	Circulatory North Right	B	26	83	21	536	1950	598	89.6%	43.2	15.4
8/3	Circulatory North Right	B	26	83	21	537	1950	598	89.8%	43.6	15.4
9/1	Circulatory East Ahead	-	-	-	-	1140	1950	1950	58.5%	2.2	0.7
9/2	Circulatory East Ahead	-	-	-	-	1191	1950	1950	61.1%	2.4	0.8
9/3	Circulatory East Right	-	-	-	-	427	1950	1950	21.9%	1.2	0.1
14/1	Circulatory SE Right	-	-	-	-	467	1950	1950	23.9%	1.2	0.2
14/2	Circulatory SE Right	-	-	-	-	286	1950	1950	14.7%	1.1	0.1
C1	Stream: 1	PRC for Signalled Lanes (%):		-0.7	Total Delay for Signalled Lanes (pcuHr):		31.30	Cycle Time (s):		88	
C1	Stream: 2	PRC for Signalled Lanes (%):		-0.2	Total Delay for Signalled Lanes (pcuHr):		34.13	Cycle Time (s):		88	
		PRC Over All Lanes (%):		-0.7	Total Delay Over All Lanes (pcuHr):		77.99				

Scenario 16: '2030 Base + Comm + 40 Acres + Dev (B8), AM'

(FG16: '2030 Base + Comm + 40 Acres + Dev (B8), AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	68	1263	0	427	1758
	B	62	0	436	0	264	762
	C	945	46	0	0	302	1293
	D	2	207	616	0	64	889
	E	412	289	464	0	0	1165
	Tot.	1421	610	2779	0	1057	5867

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	48	26
Change Point	19	74

Stage Stream: 2

Stage	1	2
Duration	40	34
Change Point	51	10

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	90.8%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	90.8%	-	-
1/1	A3 NB Off-Slip Left	D	40	58	10	64	1950	909	7.0%	15.1	0.9
1/2	A3 NB Off-Slip Ahead	D	40	58	10	825	1950	909	90.8%	41.2	23.0
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	701	1950:1950	557+673	57.4 : 56.6%	5.7	4.3
2/3	A2030 Havant Road Ahead	-	-	-	-	464	1950	542	85.6%	26.0	11.0
3/2+3/1	A3 SB Off-Slip Ahead Left	A	48	26	74	1331	1950:1950	726+747	90.3 : 90.3%	25.2	20.3
3/3	A3 SB Off-Slip Ahead	A	48	26	74	427	1950	1086	39.3%	13.8	6.1
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	762	1950:1950	456+544	71.5 : 80.2%	16.1	10.3
5/1	A27 Link Ahead	-	-	-	-	217	1950	1001	21.7%	2.3	0.1
5/2+5/3	A27 Link Ahead	-	-	-	-	1076	1950:1950	643+891	70.1 : 70.1%	4.1	4.5
6/1	Circulatory South Ahead	C	34	17	51	689	1950	776	88.8%	44.8	16.2
6/2	Circulatory South Right Ahead	C	34	17	51	691	1950	776	89.1%	44.5	18.4
6/3	Circulatory South Right	C	34	17	51	666	1950	776	85.9%	41.0	18.2
7/1	Circulatory West Ahead	-	-	-	-	389	1950	1950	19.9%	1.2	0.1
7/2	Circulatory West Right Ahead	-	-	-	-	1489	1950	1950	76.4%	3.9	1.6
8/1	Circulatory North Ahead	B	26	81	19	542	1950	598	90.6%	50.5	16.4
8/2	Circulatory North Right	B	26	81	19	540	1950	598	90.3%	45.0	15.7
8/3	Circulatory North Right	B	26	81	19	540	1950	598	90.3%	44.6	15.7
9/1	Circulatory East Ahead	-	-	-	-	1147	1950	1950	58.8%	2.2	0.7
9/2	Circulatory East Ahead	-	-	-	-	1196	1950	1950	61.3%	2.4	0.8
9/3	Circulatory East Right	-	-	-	-	427	1950	1950	21.9%	1.2	0.1
14/1	Circulatory SE Right	-	-	-	-	472	1950	1950	24.2%	1.2	0.2
14/2	Circulatory SE Right	-	-	-	-	281	1950	1950	14.4%	1.1	0.1
C1	Stream: 1	PRC for Signalled Lanes (%):		-0.7	Total Delay for Signalled Lanes (pcuHr):		32.02	Cycle Time (s):		88	
C1	Stream: 2	PRC for Signalled Lanes (%):		-0.9	Total Delay for Signalled Lanes (pcuHr):		34.43	Cycle Time (s):		88	
		PRC Over All Lanes (%):		-0.9	Total Delay Over All Lanes (pcuHr):		79.30				

Scenario 17: '2030 Base + Comm + 40 Acres + Dev (Yodel), AM'

(FG17: '2030 Base + Comm + 40 Acres + Dev (Yodel), AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	68	1267	0	427	1762
	B	62	0	438	0	264	764
	C	959	53	0	0	306	1318
	D	2	207	621	0	64	894
	E	412	289	465	0	0	1166
	Tot.	1435	617	2791	0	1061	5904

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	48	26
Change Point	15	70

Stage Stream: 2

Stage	1	2
Duration	40	34
Change Point	47	6

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	91.8%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	91.8%	-	-
1/1	A3 NB Off-Slip Left	D	40	54	6	64	1950	909	7.0%	15.1	0.9
1/2	A3 NB Off-Slip Ahead	D	40	54	6	830	1950	909	91.4%	42.3	23.4
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	701	1950:1950	546+700	57.6 : 55.2%	5.8	4.4
2/3	A2030 Havant Road Ahead	-	-	-	-	465	1950	533	87.2%	29.4	12.7
3/2+3/1	A3 SB Off-Slip Ahead Left	A	48	22	70	1335	1950:1950	726+747	90.6 : 90.6%	25.6	20.8
3/3	A3 SB Off-Slip Ahead	A	48	22	70	427	1950	1086	39.3%	13.8	6.1
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	764	1950:1950	453+540	72.0 : 81.1%	16.6	10.5
5/1	A27 Link Ahead	-	-	-	-	230	1950	1002	22.9%	2.3	0.1
5/2+5/3	A27 Link Ahead	-	-	-	-	1088	1950:1950	636+891	71.3 : 71.3%	4.3	4.8
6/1	Circulatory South Ahead	C	34	13	47	698	1950	776	90.0%	46.7	16.8
6/2	Circulatory South Right Ahead	C	34	13	47	697	1950	776	89.9%	45.9	18.8
6/3	Circulatory South Right	C	34	13	47	676	1950	776	87.2%	42.7	18.7
7/1	Circulatory West Ahead	-	-	-	-	400	1950	1950	20.5%	1.2	0.1
7/2	Circulatory West Right Ahead	-	-	-	-	1504	1950	1950	77.1%	4.0	1.7
8/1	Circulatory North Ahead	B	26	77	15	549	1950	598	91.8%	53.8	17.2
8/2	Circulatory North Right	B	26	77	15	543	1950	598	90.8%	46.2	15.9
8/3	Circulatory North Right	B	26	77	15	543	1950	598	90.8%	46.2	15.9
9/1	Circulatory East Ahead	-	-	-	-	1152	1950	1950	59.1%	2.3	0.7
9/2	Circulatory East Ahead	-	-	-	-	1201	1950	1950	61.6%	2.4	0.8
9/3	Circulatory East Right	-	-	-	-	427	1950	1950	21.9%	1.2	0.1
14/1	Circulatory SE Right	-	-	-	-	468	1950	1950	24.0%	1.2	0.2
14/2	Circulatory SE Right	-	-	-	-	285	1950	1950	14.6%	1.1	0.1
C1	Stream: 1	PRC for Signalled Lanes (%):		-2.0	Total Delay for Signalled Lanes (pcuHr):		33.25	Cycle Time (s):		88	
C1	Stream: 2	PRC for Signalled Lanes (%):		-1.5	Total Delay for Signalled Lanes (pcuHr):		35.99	Cycle Time (s):		88	
		PRC Over All Lanes (%):		-2.0	Total Delay Over All Lanes (pcuHr):		82.84				

Scenario 18: '2030 Base + Comm + 40 Acres + Dev (Amazon wPoyle&Norwich), AM'

(FG18: '2030 Base + Comm + 40 Acres + Dev (Amazon wPoyle&Norwich), AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	68	1300	0	427	1795
	B	62	0	454	0	264	780
	C	972	59	0	0	309	1340
	D	2	207	665	0	64	938
	E	412	289	474	0	0	1175
	Tot.	1448	623	2893	0	1064	6028

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	47	27
Change Point	18	72

Stage Stream: 2

Stage	1	2
Duration	41	33
Change Point	48	8

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	94.3%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	94.3%	-	-
1/1	A3 NB Off-Slip Left	D	41	55	8	64	1950	931	6.9%	14.5	0.9
1/2	A3 NB Off-Slip Ahead	D	41	55	8	874	1950	931	93.9%	47.8	26.5
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	701	1950:1950	523+687	59.3 : 56.9%	6.2	4.6
2/3	A2030 Havant Road Ahead	-	-	-	-	474	1950	512	92.5%	44.7	15.5
3/2+3/1	A3 SB Off-Slip Ahead Left	A	47	25	72	1368	1950:1950	714+737	94.3 : 94.3%	33.3	26.6
3/3	A3 SB Off-Slip Ahead	A	47	25	72	427	1950	1064	40.1%	14.5	6.4
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	780	1950:1950	422+508	77.3 : 89.4%	22.6	12.7
5/1	A27 Link Ahead	-	-	-	-	234	1950	1001	23.4%	2.3	0.2
5/2+5/3	A27 Link Ahead	-	-	-	-	1106	1950:1950	646+891	71.9 : 71.9%	4.4	5.0
6/1	Circulatory South Ahead	C	33	15	48	704	1950	753	93.4%	58.5	19.9
6/2	Circulatory South Right Ahead	C	33	15	48	707	1950	753	93.8%	58.0	21.9
6/3	Circulatory South Right	C	33	15	48	682	1950	753	90.5%	48.8	20.2
7/1	Circulatory West Ahead	-	-	-	-	413	1950	1950	21.2%	1.2	0.1
7/2	Circulatory West Right Ahead	-	-	-	-	1554	1950	1950	79.7%	4.5	1.9
8/1	Circulatory North Ahead	B	27	79	18	555	1950	620	89.5%	47.2	16.3
8/2	Circulatory North Right	B	27	79	18	570	1950	620	91.9%	48.4	17.3
8/3	Circulatory North Right	B	27	79	18	569	1950	620	91.7%	47.9	17.2
9/1	Circulatory East Ahead	-	-	-	-	1197	1950	1950	61.4%	2.4	0.8
9/2	Circulatory East Ahead	-	-	-	-	1242	1950	1950	63.7%	2.5	0.9
9/3	Circulatory East Right	-	-	-	-	427	1950	1950	21.9%	1.2	0.1
14/1	Circulatory SE Right	-	-	-	-	470	1950	1950	24.1%	1.2	0.2
14/2	Circulatory SE Right	-	-	-	-	283	1950	1950	14.5%	1.1	0.1
C1	Stream: 1	PRC for Signalled Lanes (%):		-4.8	Total Delay for Signalled Lanes (pcuHr):		36.85	Cycle Time (s):		88	
C1	Stream: 2	PRC for Signalled Lanes (%):		-4.3	Total Delay for Signalled Lanes (pcuHr):		43.92	Cycle Time (s):		88	
		PRC Over All Lanes (%):		-4.8	Total Delay Over All Lanes (pcuHr):		98.39				

Scenario 19: '2030 Base + Comm + 40 Acres + Dev (Amazon wPoyle&Norwich 3 Unit Test), AM'

(FG19: '2030 Base + Comm + 40 Acres + Dev (Amazon wPoyle&Norwich 3 Unit Test), AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	68	1288	0	427	1783
	B	62	0	449	0	264	775
	C	960	54	0	0	306	1320
	D	2	207	649	0	64	922
	E	412	289	471	0	0	1172
	Tot.	1436	618	2857	0	1061	5972

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	47	27
Change Point	32	86

Stage Stream: 2

Stage	1	2
Duration	41	33
Change Point	64	24

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	93.4%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	93.4%	-	-
1/1	A3 NB Off-Slip Left	D	41	71	24	64	1950	931	6.9%	14.5	0.9
1/2	A3 NB Off-Slip Ahead	D	41	71	24	858	1950	931	92.2%	43.2	24.7
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	701	1950:1950	537+651	59.0 : 59.0%	6.3	4.5
2/3	A2030 Havant Road Ahead	-	-	-	-	471	1950	523	90.0%	36.4	14.1
3/2+3/1	A3 SB Off-Slip Ahead Left	A	47	39	86	1356	1950:1950	715+736	93.4 : 93.4%	31.1	24.9
3/3	A3 SB Off-Slip Ahead	A	47	39	86	427	1950	1064	40.1%	14.5	6.4
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	775	1950:1950	433+519	75.3 : 86.5%	19.8	12.0
5/1	A27 Link Ahead	-	-	-	-	219	1950	998	21.9%	2.3	0.1
5/2+5/3	A27 Link Ahead	-	-	-	-	1101	1950:1950	652+891	71.4 : 71.4%	4.3	4.8
6/1	Circulatory South Ahead	C	33	31	64	698	1950	753	92.6%	53.8	18.5
6/2	Circulatory South Right Ahead	C	33	31	64	698	1950	753	92.6%	53.3	20.7
6/3	Circulatory South Right	C	33	31	64	677	1950	753	89.9%	48.0	19.9
7/1	Circulatory West Ahead	-	-	-	-	401	1950	1950	20.6%	1.2	0.1
7/2	Circulatory West Right Ahead	-	-	-	-	1533	1950	1950	78.6%	4.3	1.8
8/1	Circulatory North Ahead	B	27	5	32	550	1950	620	88.6%	45.9	15.7
8/2	Circulatory North Right	B	27	5	32	560	1950	620	90.3%	45.1	16.1
8/3	Circulatory North Right	B	27	5	32	560	1950	620	90.3%	45.0	16.1
9/1	Circulatory East Ahead	-	-	-	-	1180	1950	1950	60.5%	2.3	0.8
9/2	Circulatory East Ahead	-	-	-	-	1228	1950	1950	63.0%	2.5	0.8
9/3	Circulatory East Right	-	-	-	-	427	1950	1950	21.9%	1.2	0.1
14/1	Circulatory SE Right	-	-	-	-	479	1950	1950	24.6%	1.2	0.2
14/2	Circulatory SE Right	-	-	-	-	274	1950	1950	14.1%	1.1	0.1
C1	Stream: 1	PRC for Signalled Lanes (%):		-3.8	Total Delay for Signalled Lanes (pcuHr):		34.46	Cycle Time (s):		88	
C1	Stream: 2	PRC for Signalled Lanes (%):		-2.9	Total Delay for Signalled Lanes (pcuHr):		40.33	Cycle Time (s):		88	
		PRC Over All Lanes (%):		-3.8	Total Delay Over All Lanes(pcuHr):		90.42				

Scenario 20: '2030 Base + Comm + 40 Acres + Dev (Amazon Full Dev), AM'

(FG20: '2030 Base + Comm + 40 Acres + Dev (Amazon Full Dev), AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	68	1260	0	427	1755
	B	62	0	435	0	264	761
	C	977	62	0	0	310	1349
	D	2	207	612	0	64	885
	E	412	289	464	0	0	1165
	Tot.	1453	626	2771	0	1065	5915

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	47	27
Change Point	16	70

Stage Stream: 2

Stage	1	2
Duration	40	34
Change Point	48	7

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	91.4%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	91.4%	-	-
1/1	A3 NB Off-Slip Left	D	40	55	7	64	1950	909	7.0%	15.1	0.9
1/2	A3 NB Off-Slip Ahead	D	40	55	7	821	1950	909	90.4%	40.4	22.7
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	701	1950:1950	537+756	57.5 : 51.8%	5.7	4.5
2/3	A2030 Havant Road Ahead	-	-	-	-	464	1950	527	88.0%	31.9	13.0
3/2+3/1	A3 SB Off-Slip Ahead Left	A	47	23	70	1328	1950:1950	716+736	91.4 : 91.4%	27.5	21.9
3/3	A3 SB Off-Slip Ahead	A	47	23	70	427	1950	1064	40.1%	14.5	6.4
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	761	1950:1950	459+545	71.0 : 79.8%	15.2	10.2
5/1	A27 Link Ahead	-	-	-	-	225	1950	998	22.5%	2.3	0.1
5/2+5/3	A27 Link Ahead	-	-	-	-	1124	1950:1950	638+891	73.5 : 73.5%	4.6	5.0
6/1	Circulatory South Ahead	C	34	14	48	703	1950	776	90.6%	48.1	17.5
6/2	Circulatory South Right Ahead	C	34	14	48	704	1950	776	90.8%	47.7	19.7
6/3	Circulatory South Right	C	34	14	48	695	1950	776	89.6%	46.1	20.2
7/1	Circulatory West Ahead	-	-	-	-	408	1950	1950	20.9%	1.2	0.1
7/2	Circulatory West Right Ahead	-	-	-	-	1514	1950	1950	77.6%	4.1	1.7
8/1	Circulatory North Ahead	B	27	77	16	558	1950	620	89.9%	47.9	16.5
8/2	Circulatory North Right	B	27	77	16	538	1950	620	86.7%	37.4	14.0
8/3	Circulatory North Right	B	27	77	16	538	1950	620	86.7%	37.4	14.0
9/1	Circulatory East Ahead	-	-	-	-	1143	1950	1950	58.6%	2.2	0.7
9/2	Circulatory East Ahead	-	-	-	-	1193	1950	1950	61.2%	2.4	0.8
9/3	Circulatory East Right	-	-	-	-	427	1950	1950	21.9%	1.2	0.1
14/1	Circulatory SE Right	-	-	-	-	478	1950	1950	24.5%	1.2	0.2
14/2	Circulatory SE Right	-	-	-	-	275	1950	1950	14.1%	1.1	0.1
C1	Stream: 1	PRC for Signalled Lanes (%):	-1.6	Total Delay for Signalled Lanes (pcuHr):				30.48	Cycle Time (s): 88		
C1	Stream: 2	PRC for Signalled Lanes (%):	-0.9	Total Delay for Signalled Lanes (pcuHr):				37.10	Cycle Time (s): 88		
		PRC Over All Lanes (%):	-1.6	Total Delay Over All Lanes (pcuHr):				81.34			

Scenario 21: '2030 Base + Comm + 40 Acres + Dev (Yodel Full Dev), AM'

(FG21: '2030 Base + Comm + 40 Acres + Dev (Yodel Full Dev), AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	68	1264	0	427	1759
	B	62	0	437	0	264	763
	C	970	58	0	0	308	1336
	D	2	207	618	0	64	891
	E	412	289	465	0	0	1166
	Tot.	1446	622	2784	0	1063	5915

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	47	27
Change Point	16	70

Stage Stream: 2

Stage	1	2
Duration	40	34
Change Point	48	7

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	91.7%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	91.7%	-	-
1/1	A3 NB Off-Slip Left	D	40	55	7	64	1950	909	7.0%	15.1	0.9
1/2	A3 NB Off-Slip Ahead	D	40	55	7	827	1950	909	91.0%	41.7	23.2
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	701	1950:1950	541+714	57.8 : 54.3%	5.9	4.5
2/3	A2030 Havant Road Ahead	-	-	-	-	465	1950	529	87.9%	31.4	13.0
3/2+3/1	A3 SB Off-Slip Ahead Left	A	47	23	70	1332	1950:1950	716+736	91.7 : 91.7%	27.9	22.1
3/3	A3 SB Off-Slip Ahead	A	47	23	70	427	1950	1064	40.1%	14.5	6.4
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	763	1950:1950	456+542	71.6 : 80.7%	15.8	10.5
5/1	A27 Link Ahead	-	-	-	-	221	1950	998	22.1%	2.3	0.1
5/2+5/3	A27 Link Ahead	-	-	-	-	1115	1950:1950	642+891	72.7 : 72.7%	4.4	4.9
6/1	Circulatory South Ahead	C	34	14	48	700	1950	776	90.3%	47.3	17.3
6/2	Circulatory South Right Ahead	C	34	14	48	701	1950	776	90.4%	46.9	19.4
6/3	Circulatory South Right	C	34	14	48	688	1950	776	88.7%	44.6	19.6
7/1	Circulatory West Ahead	-	-	-	-	404	1950	1950	20.7%	1.2	0.1
7/2	Circulatory West Right Ahead	-	-	-	-	1513	1950	1950	77.6%	4.1	1.7
8/1	Circulatory North Ahead	B	27	77	16	554	1950	620	89.3%	46.6	16.2
8/2	Circulatory North Right	B	27	77	16	542	1950	620	87.4%	38.4	14.3
8/3	Circulatory North Right	B	27	77	16	541	1950	620	87.2%	38.2	14.2
9/1	Circulatory East Ahead	-	-	-	-	1149	1950	1950	58.9%	2.2	0.7
9/2	Circulatory East Ahead	-	-	-	-	1198	1950	1950	61.4%	2.4	0.8
9/3	Circulatory East Right	-	-	-	-	427	1950	1950	21.9%	1.2	0.1
14/1	Circulatory SE Right	-	-	-	-	479	1950	1950	24.6%	1.2	0.2
14/2	Circulatory SE Right	-	-	-	-	274	1950	1950	14.1%	1.1	0.1
C1	Stream: 1	PRC for Signalled Lanes (%):		-1.9	Total Delay for Signalled Lanes (pcuHr):		30.75	Cycle Time (s):		88	
C1	Stream: 2	PRC for Signalled Lanes (%):		-1.1	Total Delay for Signalled Lanes (pcuHr):		36.69	Cycle Time (s):		88	
		PRC Over All Lanes (%):		-1.9	Total Delay Over All Lanes (pcuHr):		81.24				

Scenario 22: '2025 Base + Comm + 40 Acres + Dev (B2), AM'

(FG22: '2025 Base + Comm + 40 Acres + Dev (B2), AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	64	1207	0	405	1676
	B	58	0	419	0	250	727
	C	894	43	0	0	286	1223
	D	2	196	599	0	62	859
	E	391	274	447	0	0	1112
	Tot.	1345	577	2672	0	1003	5597

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	34	24
Change Point	25	66

Stage Stream: 2

Stage	1	2
Duration	32	26
Change Point	43	10

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	89.2%	-	-	
Rusty Cutter	-	-	-	-	-	-	-	-	89.2%	-	-	
1/1	A3 NB Off-Slip Left	D	32	50	10	62	1950	894	6.9%	13.1	0.7	
1/2	A3 NB Off-Slip Ahead	D	32	50	10	797	1950	894	89.2%	35.1	18.2	
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	665	1950:1950	588+774	52.1 : 46.4%	3.5	2.8	
2/3	A2030 Havant Road Ahead	-	-	-	-	447	1950	572	78.2%	16.3	5.6	
3/2+3/1	A3 SB Off-Slip Ahead Left	A	34	32	66	1271	1950:1950	706+720	89.1 : 89.1%	25.2	14.2	
3/3	A3 SB Off-Slip Ahead	A	34	32	66	405	1950	948	42.7%	15.3	5.5	
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	727	1950:1950	503+575	61.3 : 72.9%	10.4	4.2	
5/1	A27 Link Ahead	-	-	-	-	200	1950	1012	19.8%	2.2	0.1	
5/2+5/3	A27 Link Ahead	-	-	-	-	1023	1950:1950	624+907	66.8 : 66.8%	3.6	2.7	
6/1	Circulatory South Ahead	C	26	17	43	644	1950	731	88.1%	47.2	15.5	
6/2	Circulatory South Right Ahead	C	26	17	43	649	1950	731	88.8%	44.2	15.7	
6/3	Circulatory South Right	C	26	17	43	643	1950	731	87.9%	39.7	15.1	
7/1	Circulatory West Ahead	-	-	-	-	354	1950	1950	18.2%	1.1	0.1	
7/2	Circulatory West Right Ahead	-	-	-	-	1438	1950	1950	73.7%	3.5	1.4	
8/1	Circulatory North Ahead	B	24	1	25	513	1950	677	75.8%	26.1	9.9	
8/2	Circulatory North Right	B	24	1	25	524	1950	677	77.4%	22.3	9.9	
8/3	Circulatory North Right	B	24	1	25	522	1950	677	77.1%	22.1	9.8	
9/1	Circulatory East Ahead	-	-	-	-	1102	1950	1950	56.5%	2.1	0.6	
9/2	Circulatory East Ahead	-	-	-	-	1151	1950	1950	59.0%	2.2	0.7	
9/3	Circulatory East Right	-	-	-	-	405	1950	1950	20.8%	1.2	0.1	
14/1	Circulatory SE Right	-	-	-	-	444	1950	1950	22.8%	1.2	0.1	
14/2	Circulatory SE Right	-	-	-	-	269	1950	1950	13.8%	1.1	0.1	
C1	Stream: 1	PRC for Signalled Lanes (%):		1.0	Total Delay for Signalled Lanes (pcuHr):			20.78	Cycle Time (s):			72
C1	Stream: 2	PRC for Signalled Lanes (%):		0.9	Total Delay for Signalled Lanes (pcuHr):			31.51	Cycle Time (s):			72
		PRC Over All Lanes (%):		0.9	Total Delay Over All Lanes(pcuHr):			61.45				

Scenario 23: '2030 Base + Comm + 40 Acres + Dev (B2), AM'

(FG23: '2030 Base + Comm + 40 Acres + Dev (B2), AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	68	1274	0	427	1769
	B	62	0	442	0	264	768
	C	944	46	0	0	302	1292
	D	2	207	631	0	64	904
	E	412	289	467	0	0	1168
	Tot.	1420	610	2814	0	1057	5901

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	48	26
Change Point	17	72

Stage Stream: 2

Stage	1	2
Duration	41	33
Change Point	49	9

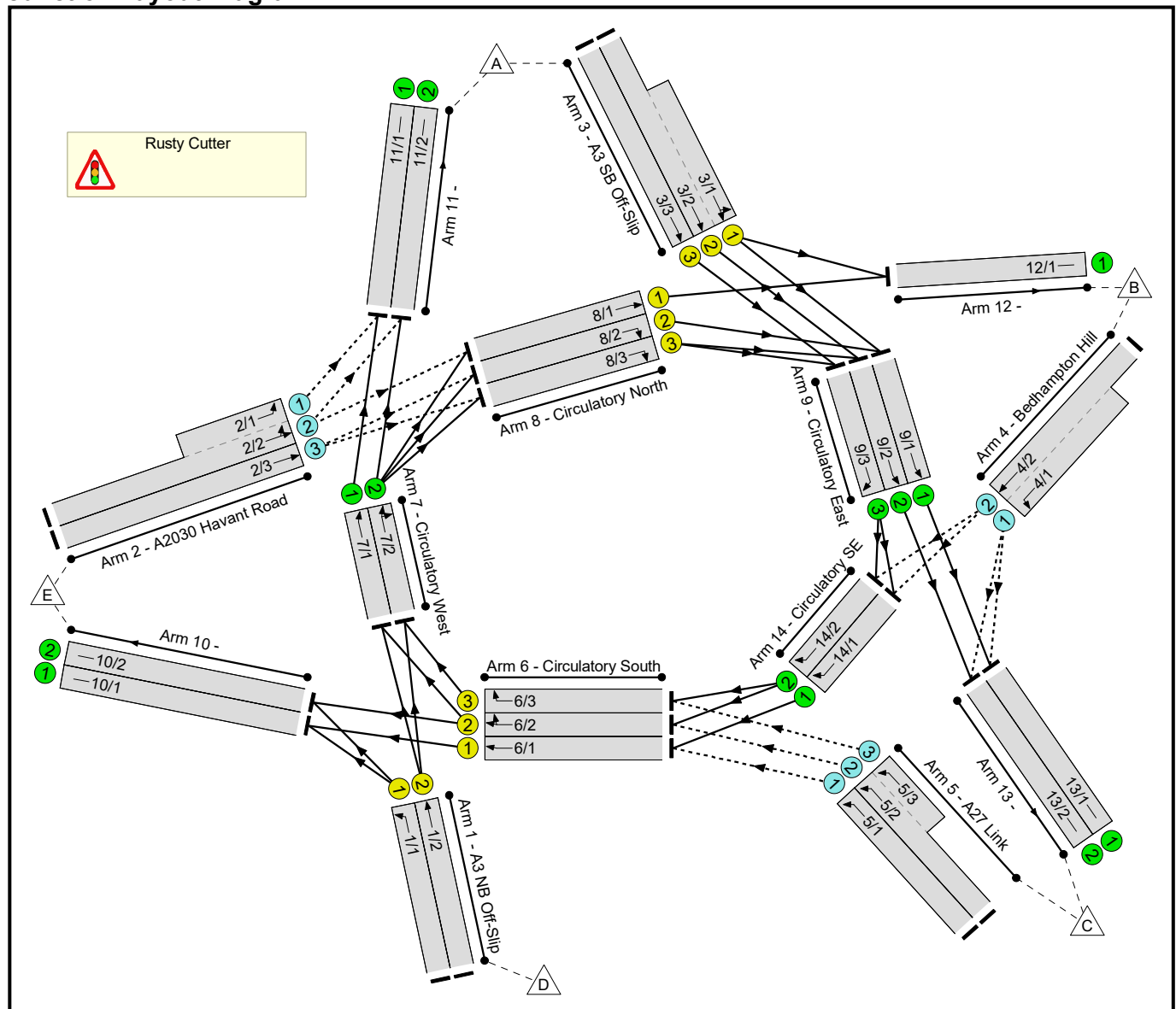
Link Results

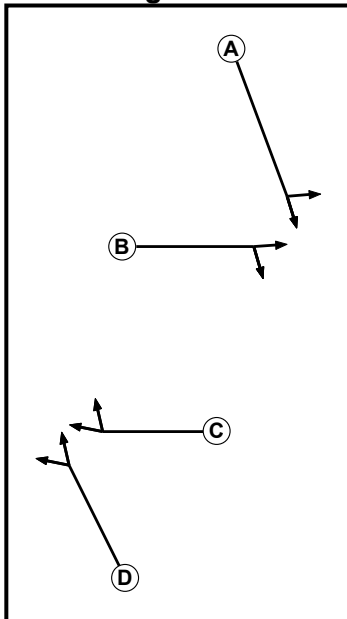
Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	91.8%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	91.8%	-	-
1/1	A3 NB Off-Slip Left	D	41	56	9	64	1950	931	6.9%	14.5	0.9
1/2	A3 NB Off-Slip Ahead	D	41	56	9	840	1950	931	90.3%	39.3	22.9
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	701	1950:1950	553+658	57.9 : 57.9%	5.9	4.3
2/3	A2030 Havant Road Ahead	-	-	-	-	467	1950	538	86.9%	28.7	12.5
3/2+3/1	A3 SB Off-Slip Ahead Left	A	48	24	72	1342	1950:1950	726+748	91.1 : 91.1%	26.3	21.1
3/3	A3 SB Off-Slip Ahead	A	48	24	72	427	1950	1086	39.3%	13.8	6.1
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	768	1950:1950	445+533	73.2 : 82.9%	18.0	11.0
5/1	A27 Link Ahead	-	-	-	-	215	1950	1000	21.5%	2.3	0.1
5/2+5/3	A27 Link Ahead	-	-	-	-	1077	1950:1950	637+891	70.5 : 70.5%	4.2	4.5
6/1	Circulatory South Ahead	C	33	16	49	688	1950	753	91.3%	50.6	17.3
6/2	Circulatory South Right Ahead	C	33	16	49	687	1950	753	91.2%	49.7	19.4
6/3	Circulatory South Right	C	33	16	49	670	1950	753	88.9%	46.4	19.2
7/1	Circulatory West Ahead	-	-	-	-	384	1950	1950	19.7%	1.1	0.1
7/2	Circulatory West Right Ahead	-	-	-	-	1508	1950	1950	77.3%	4.0	1.7
8/1	Circulatory North Ahead	B	26	79	17	542	1950	598	90.6%	50.8	16.4
8/2	Circulatory North Right	B	26	79	17	549	1950	598	91.8%	49.3	16.7
8/3	Circulatory North Right	B	26	79	17	549	1950	598	91.8%	49.3	16.7
9/1	Circulatory East Ahead	-	-	-	-	1162	1950	1950	59.6%	2.3	0.7
9/2	Circulatory East Ahead	-	-	-	-	1210	1950	1950	62.1%	2.4	0.8
9/3	Circulatory East Right	-	-	-	-	427	1950	1950	21.9%	1.2	0.1
14/1	Circulatory SE Right	-	-	-	-	473	1950	1950	24.3%	1.2	0.2
14/2	Circulatory SE Right	-	-	-	-	280	1950	1950	14.4%	1.1	0.1
C1	Stream: 1	PRC for Signalled Lanes (%):	-2.0	Total Delay for Signalled Lanes (pcuHr):				34.10	Cycle Time (s): 88		
C1	Stream: 2	PRC for Signalled Lanes (%):	-1.5	Total Delay for Signalled Lanes (pcuHr):				37.21	Cycle Time (s): 88		
		PRC Over All Lanes (%):	-2.0	Total Delay Over All Lanes (pcuHr):				85.14			

User and Project Details

Project:	Harts Farm Way
Title:	Rusty Cutter Roundabout
Design Layout Ref:	Existing Junction Layout - PM Model
Additional detail:	PBA Approved Model
File name:	Rusty Cutter v11.4 - Approved Model - PM.lsg3x
Author:	David Noyce
Company:	Vectos (South) Ltd
Address:	Network Building, 97 Tottenham Court Road, London W1T 4TP

Junction Layout Diagram



Phase Diagram**Phase Input Data**

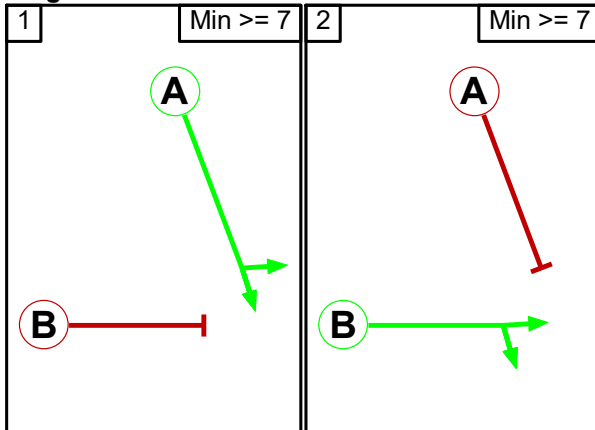
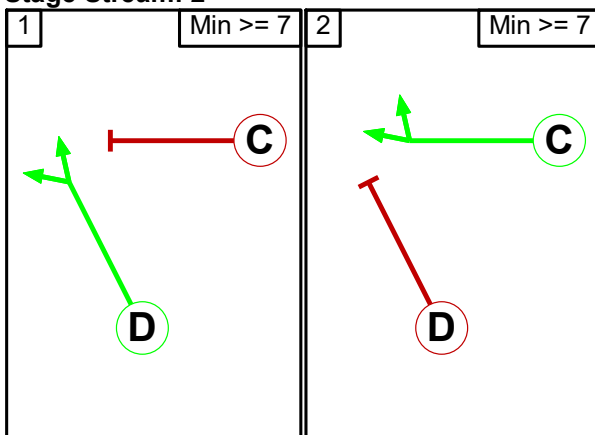
Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	1		7	7
B	Traffic	1		7	7
C	Traffic	2		7	7
D	Traffic	2		7	7

Intergreens

		Starting Phase				
Terminating Phase		A	B	C	D	
	A	7	-	-	-	
	B	7	-	-	-	
	C	-	-	7	-	
	D	-	-	7	-	

Stage Data

Stream	Stage No.	Phases in Stage
1	1	A
1	2	B
2	1	D
2	2	C

Stage Diagrams**Stage Stream: 1****Stage Stream: 2****Phase Delays****Stage Stream: 1**

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Stage Stream: 2

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Lane Input Data

Junction: Rusty Cutter												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (A3 NB Off-Slip)	U	D	2	3	60.0	User	1950	-	-	-	-	-
1/2 (A3 NB Off-Slip)	U	D	2	3	60.0	User	1950	-	-	-	-	-
2/1 (A2030 Havant Road)	O		2	3	7.0	User	1950	-	-	-	-	-
2/2 (A2030 Havant Road)	O		2	3	60.0	User	1950	-	-	-	-	-
2/3 (A2030 Havant Road)	O		2	3	60.0	User	1950	-	-	-	-	-
3/1 (A3 SB Off-Slip)	U	A	2	3	9.6	User	1950	-	-	-	-	-
3/2 (A3 SB Off-Slip)	U	A	2	3	60.0	User	1950	-	-	-	-	-
3/3 (A3 SB Off-Slip)	U	A	2	3	60.0	User	1950	-	-	-	-	-
4/1 (Bedhampton Hill)	O		2	3	12.5	User	1950	-	-	-	-	-
4/2 (Bedhampton Hill)	O		2	3	60.0	User	1950	-	-	-	-	-
5/1 (A27 Link)	O		2	3	60.0	User	1950	-	-	-	-	-
5/2 (A27 Link)	O		2	3	7.0	User	1950	-	-	-	-	-
5/3 (A27 Link)	O		2	3	5.2	User	1950	-	-	-	-	-
6/1 (Circulatory South)	U	C	2	3	15.7	User	1950	-	-	-	-	-
6/2 (Circulatory South)	U	C	2	3	15.7	User	1950	-	-	-	-	-
6/3 (Circulatory South)	U	C	2	3	15.7	User	1950	-	-	-	-	-
7/1 (Circulatory West)	U		2	3	17.4	User	1950	-	-	-	-	-
7/2 (Circulatory West)	U		2	3	17.4	User	1950	-	-	-	-	-

8/1 (Circulatory North)	U	B	2	3	26.1	User	1950	-	-	-	-	-
8/2 (Circulatory North)	U	B	2	3	26.1	User	1950	-	-	-	-	-
8/3 (Circulatory North)	U	B	2	3	26.1	User	1950	-	-	-	-	-
9/1 (Circulatory East)	U		2	3	14.8	User	1950	-	-	-	-	-
9/2 (Circulatory East)	U		2	3	14.8	User	1950	-	-	-	-	-
9/3 (Circulatory East)	U		2	3	14.8	User	1950	-	-	-	-	-
14/1 (Circulatory SE)	U		2	3	19.1	User	1950	-	-	-	-	-
14/2 (Circulatory SE)	U		2	3	19.1	User	1950	-	-	-	-	-

Give-Way Lane Input Data

Junction: Rusty Cutter											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Block Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in IG (PCU)
2/1 (A2030 Havant Road)	11/1 (Left)	1175	0	7/1	0.33	All	-	-	-	-	-
				7/2	0.33	To 11/2 (Ahead)					
2/2 (A2030 Havant Road)	8/1 (Ahead)	1175	0	7/1	0.33	All	-	-	-	-	-
				7/2	0.33	All					
	11/2 (Left)	1175	0	7/1	0.33	All					
				7/2	0.33	To 11/2 (Ahead)					
2/3 (A2030 Havant Road)	8/2 (Ahead)	1175	0	7/1	0.33	All	-	-	-	-	-
				7/2	0.33	All					
	8/3 (Ahead)	1175	0	7/1	0.33	All					
				7/2	0.33	All					
4/1 (Bedhampton Hill)	13/1 (Left)	1531	0	9/1	0.47	All	-	-	-	-	-
				9/2	0.47	All					
	13/2 (Left)	1531	0	9/1	0.47	All					
				9/2	0.47	All					
4/2 (Bedhampton Hill)	14/1 (Ahead)	1531	0	9/1	0.47	All	-	-	-	-	-
				9/2	0.47	All					
				9/3	0.47	All					
	14/2 (Ahead)	1531	0	9/1	0.47	All					
				9/2	0.47	All					
				9/3	0.47	All					
5/1 (A27 Link)	6/1 (Left)	1184	0	14/1	0.39	All	-	-	-	-	-
5/2 (A27 Link)	6/2 (Left)	1184	0	14/1	0.39	All	-	-	-	-	-
				14/2	0.39	To 6/2 (Right)					
5/3 (A27 Link)	6/3 (Left)	1184	0	14/1	0.39	All	-	-	-	-	-
				14/2	0.39	All					

Lane Connector Input Data

Junction: Rusty Cutter				
Org Lane	Dest Lane	Junction	Mean Cruise Time	Platoon Dispersion
1/1	10/1	Internal	5	35
1/1	10/2	Internal	5	35
1/2	7/1	Internal	8	35
1/2	7/2	Internal	8	35
2/1	11/1	Internal	5	35
2/2	8/1	Internal	10	35
2/2	11/2	Internal	5	35
2/3	8/2	Internal	10	35
2/3	8/3	Internal	10	35
3/1	9/1	Internal	7	35
3/1	12/1	Internal	5	35
3/2	9/2	Internal	7	35
3/3	9/3	Internal	7	35
4/1	13/1	Internal	5	35
4/1	13/2	Internal	5	35
4/2	14/1	Internal	5	35
4/2	14/2	Internal	5	35
5/1	6/1	Internal	5	35
5/2	6/2	Internal	5	35
5/3	6/3	Internal	5	35
6/1	10/1	Internal	5	35
6/2	7/1	Internal	8	35
6/2	10/2	Internal	5	35
6/3	7/2	Internal	8	35
7/1	11/1	Internal	5	35
7/2	8/1	Internal	10	35
7/2	8/2	Internal	10	35
7/2	8/3	Internal	10	35
7/2	11/2	Internal	5	35
8/1	12/1	Internal	5	35
8/2	9/1	Internal	7	35
8/3	9/2	Internal	7	35
8/3	9/3	Internal	7	35
9/1	13/1	Internal	5	35
9/2	13/2	Internal	5	35
9/3	14/1	Internal	5	35
9/3	14/2	Internal	5	35
14/1	6/1	Internal	5	35

14/2	6/2	Internal	5	35
14/2	6/3	Internal	5	35

Scenario 1: '2016 Base, PM'

(FG1: '2016 Base, PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	82	801	0	277	1160
	B	66	0	368	0	275	709
	C	969	40	0	0	302	1311
	D	4	354	159	0	66	583
	E	262	335	226	0	0	823
	Tot.	1301	811	1554	0	920	4586

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	19	31
Change Point	13	39

Stage Stream: 2

Stage	1	2
Duration	22	28
Change Point	28	57

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	76.8%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	76.8%	-	-
1/1	A3 NB Off-Slip Left	D	22	35	57	66	1950	701	9.4%	16.5	0.8
1/2	A3 NB Off-Slip Ahead	D	22	35	57	517	1950	701	73.8%	27.5	9.3
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	597	1950:1950	649+508	51.6 : 51.6%	4.0	2.4
2/3	A2030 Havant Road Ahead	-	-	-	-	226	1950	649	34.8%	4.7	1.1
3/2+3/1	A3 SB Off-Slip Ahead Left	A	19	20	39	883	1950:1950	572+578	76.8 : 76.8%	26.2	8.5
3/3	A3 SB Off-Slip Ahead	A	19	20	39	277	1950	609	45.5%	23.0	4.3
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	709	1950:1950	937+982	36.4 : 37.5%	3.2	2.3
5/1	A27 Link Left	-	-	-	-	302	1950	1053	28.7%	2.4	0.2
5/2+5/3	A27 Link Left	-	-	-	-	1009	1950:1950	606+943	65.1 : 65.1%	3.3	2.0
6/1	Circulatory South Ahead	C	28	0	28	637	1950	884	72.1%	25.0	11.2
6/2	Circulatory South Right Ahead	C	28	0	28	650	1950	884	73.6%	24.0	11.3
6/3	Circulatory South Right	C	28	0	28	642	1950	884	72.7%	21.5	10.6
7/1	Circulatory West Ahead	-	-	-	-	437	1950	1950	22.4%	1.2	0.1
7/2	Circulatory West Right Ahead	-	-	-	-	1155	1950	1950	59.2%	2.3	0.7
8/1	Circulatory North Ahead	B	31	46	13	729	1950	975	74.8%	13.1	8.5
8/2	Circulatory North Right	B	31	46	13	200	1950	975	20.5%	7.3	1.3
8/3	Circulatory North Right	B	31	46	13	185	1950	975	19.0%	7.4	1.2
9/1	Circulatory East Ahead	-	-	-	-	562	1950	1950	28.8%	1.3	0.2
9/2	Circulatory East Ahead	-	-	-	-	624	1950	1950	32.0%	1.4	0.2
9/3	Circulatory East Right	-	-	-	-	277	1950	1950	14.2%	1.1	0.1
14/1	Circulatory SE Right	-	-	-	-	335	1950	1950	17.2%	1.1	0.1
14/2	Circulatory SE Right	-	-	-	-	283	1950	1950	14.5%	1.1	0.1
C1 Stream: 1	PRC for Signalled Lanes (%):		17.3	Total Delay for Signalled Lanes (pcuHr):		11.64		Cycle Time (s): 64			
C1 Stream: 2	PRC for Signalled Lanes (%):		22.0	Total Delay for Signalled Lanes (pcuHr):		16.85		Cycle Time (s): 64			
	PRC Over All Lanes (%):		17.3	Total Delay Over All Lanes (pcuHr):		32.80					

Scenario 3: '2025 Base + Comm + 40 Acres, PM'

(FG3: '2025 Base + Comm + 40 Acres, PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	93	916	0	346	1355
	B	75	0	420	0	318	813
	C	1108	46	0	0	367	1521
	D	5	404	181	0	114	704
	E	318	387	299	0	0	1004
	Tot.	1506	930	1816	0	1145	5397

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	19	31
Change Point	9	35

Stage Stream: 2

Stage	1	2
Duration	22	28
Change Point	27	56

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	87.7%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	87.7%	-	-
1/1	A3 NB Off-Slip Left	D	22	34	56	114	1950	701	16.3%	17.0	1.5
1/2	A3 NB Off-Slip Ahead	D	22	34	56	590	1950	701	84.2%	34.4	12.1
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	705	1950:1950	574+472	67.4 : 67.4%	7.1	4.1
2/3	A2030 Havant Road Ahead	-	-	-	-	299	1950	574	52.1%	8.0	2.5
3/2+3/1	A3 SB Off-Slip Ahead Left	A	19	16	35	1009	1950:1950	573+578	87.7 : 87.7%	32.5	11.7
3/3	A3 SB Off-Slip Ahead	A	19	16	35	346	1950	609	56.8%	25.2	5.7
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	813	1950:1950	846+888	46.5 : 47.3%	4.7	3.2
5/1	A27 Link Left	-	-	-	-	364	1950	1034	35.2%	2.7	0.3
5/2+5/3	A27 Link Left	-	-	-	-	1157	1950:1950	568+895	79.1 : 79.1%	6.0	5.0
6/1	Circulatory South Ahead	C	28	63	27	749	1950	884	84.8%	33.2	15.0
6/2	Circulatory South Right Ahead	C	28	63	27	758	1950	884	85.8%	31.5	15.1
6/3	Circulatory South Right	C	28	63	27	753	1950	884	85.2%	28.4	14.7
7/1	Circulatory West Ahead	-	-	-	-	481	1950	1950	24.7%	1.2	0.2
7/2	Circulatory West Right Ahead	-	-	-	-	1338	1950	1950	68.6%	2.9	1.1
8/1	Circulatory North Ahead	B	31	42	9	837	1950	975	85.8%	18.4	10.1
8/2	Circulatory North Right	B	31	42	9	249	1950	975	25.5%	7.8	1.5
8/3	Circulatory North Right	B	31	42	9	231	1950	975	23.7%	7.8	1.4
9/1	Circulatory East Ahead	-	-	-	-	663	1950	1950	34.0%	1.4	0.3
9/2	Circulatory East Ahead	-	-	-	-	733	1950	1950	37.6%	1.5	0.3
9/3	Circulatory East Right	-	-	-	-	346	1950	1950	17.7%	1.1	0.1
14/1	Circulatory SE Right	-	-	-	-	385	1950	1950	19.7%	1.1	0.1
14/2	Circulatory SE Right	-	-	-	-	354	1950	1950	18.2%	1.1	0.1
C1 Stream: 1	PRC for Signalled Lanes (%):			2.7	Total Delay for Signalled Lanes (pcuHr):			16.86	Cycle Time (s): 64		
C1 Stream: 2	PRC for Signalled Lanes (%):			4.9	Total Delay for Signalled Lanes (pcuHr):			25.64	Cycle Time (s): 64		
	PRC Over All Lanes (%):			2.7	Total Delay Over All Lanes(pcuHr):			49.97			

Scenario 4: '2025 Base + Comm + 40 Acres + Dev (Amazon), PM'

(FG4: '2025 Base + Comm + 40 Acres + Dev (Amazon), PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	93	934	0	346	1373
	B	75	0	429	0	318	822
	C	1135	59	0	0	375	1569
	D	5	404	206	0	114	729
	E	318	387	304	0	0	1009
	Tot.	1533	943	1873	0	1153	5502

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	19	31
Change Point	9	35

Stage Stream: 2

Stage	1	2
Duration	22	28
Change Point	26	55

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	89.3%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	89.3%	-	-
1/1	A3 NB Off-Slip Left	D	22	33	55	114	1950	701	16.3%	17.0	1.5
1/2	A3 NB Off-Slip Ahead	D	22	33	55	615	1950	701	87.8%	38.7	13.4
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	705	1950:1950	553+454	70.0 : 70.0%	8.1	4.5
2/3	A2030 Havant Road Ahead	-	-	-	-	304	1950	553	55.0%	9.1	2.8
3/2+3/1	A3 SB Off-Slip Ahead Left	A	19	16	35	1027	1950:1950	571+579	89.3 : 89.3%	34.3	12.4
3/3	A3 SB Off-Slip Ahead	A	19	16	35	346	1950	609	56.8%	25.2	5.7
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	822	1950:1950	826+867	47.6 : 49.5%	5.0	3.2
5/1	A27 Link Left	-	-	-	-	351	1950	1021	34.4%	2.7	0.3
5/2+5/3	A27 Link Left	-	-	-	-	1218	1950:1950	617+895	80.5 : 80.5%	6.2	5.4
6/1	Circulatory South Ahead	C	28	62	26	769	1950	884	87.0%	35.2	16.0
6/2	Circulatory South Right Ahead	C	28	62	26	774	1950	884	87.6%	33.1	16.0
6/3	Circulatory South Right	C	28	62	26	765	1950	884	86.6%	29.7	15.2
7/1	Circulatory West Ahead	-	-	-	-	509	1950	1950	26.1%	1.2	0.2
7/2	Circulatory West Right Ahead	-	-	-	-	1375	1950	1950	70.5%	3.1	1.2
8/1	Circulatory North Ahead	B	31	42	9	850	1950	975	87.2%	19.7	12.5
8/2	Circulatory North Right	B	31	42	9	263	1950	975	27.0%	7.4	1.5
8/3	Circulatory North Right	B	31	42	9	247	1950	975	25.3%	7.4	1.4
9/1	Circulatory East Ahead	-	-	-	-	687	1950	1950	35.2%	1.4	0.3
9/2	Circulatory East Ahead	-	-	-	-	757	1950	1950	38.8%	1.5	0.3
9/3	Circulatory East Right	-	-	-	-	346	1950	1950	17.7%	1.1	0.1
14/1	Circulatory SE Right	-	-	-	-	418	1950	1950	21.4%	1.2	0.1
14/2	Circulatory SE Right	-	-	-	-	321	1950	1950	16.5%	1.1	0.1
C1 Stream: 1	PRC for Signalled Lanes (%):			0.7	Total Delay for Signalled Lanes (pcuHr):			17.92	Cycle Time (s): 64		
C1 Stream: 2	PRC for Signalled Lanes (%):			2.6	Total Delay for Signalled Lanes (pcuHr):			28.09	Cycle Time (s): 64		
	PRC Over All Lanes (%):			0.7	Total Delay Over All Lanes (pcuHr):			54.16			

Scenario 5: '2025 Base + Comm + 40 Acres + Dev (TNT), PM'

(FG5: '2025 Base + Comm + 40 Acres + Dev (TNT), PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	93	929	0	346	1368
	B	75	0	427	0	318	820
	C	1116	50	0	0	369	1535
	D	5	404	199	0	114	722
	E	318	387	302	0	0	1007
	Tot.	1514	934	1857	0	1147	5452

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	19	31
Change Point	9	35

Stage Stream: 2

Stage	1	2
Duration	22	28
Change Point	26	55

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	88.8%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	88.8%	-	-
1/1	A3 NB Off-Slip Left	D	22	33	55	114	1950	701	16.3%	17.0	1.5
1/2	A3 NB Off-Slip Ahead	D	22	33	55	608	1950	701	86.8%	37.3	13.0
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	705	1950:1950	565+464	68.6 : 68.6%	7.4	4.3
2/3	A2030 Havant Road Ahead	-	-	-	-	302	1950	565	53.5%	8.4	2.5
3/2+3/1	A3 SB Off-Slip Ahead Left	A	19	16	35	1022	1950:1950	572+579	88.8 : 88.8%	33.8	12.2
3/3	A3 SB Off-Slip Ahead	A	19	16	35	346	1950	609	56.8%	25.2	5.7
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	820	1950:1950	832+873	47.3 : 48.9%	4.9	3.2
5/1	A27 Link Left	-	-	-	-	369	1950	1033	35.7%	2.7	0.3
5/2+5/3	A27 Link Left	-	-	-	-	1166	1950:1950	573+895	79.4 : 79.4%	6.1	5.3
6/1	Circulatory South Ahead	C	28	62	26	756	1950	884	85.6%	33.1	15.4
6/2	Circulatory South Right Ahead	C	28	62	26	763	1950	884	86.4%	32.4	15.5
6/3	Circulatory South Right	C	28	62	26	755	1950	884	85.4%	28.6	14.8
7/1	Circulatory West Ahead	-	-	-	-	491	1950	1950	25.2%	1.2	0.2
7/2	Circulatory West Right Ahead	-	-	-	-	1358	1950	1950	69.6%	3.0	1.1
8/1	Circulatory North Ahead	B	31	42	9	841	1950	975	86.3%	18.8	11.7
8/2	Circulatory North Right	B	31	42	9	258	1950	975	26.5%	7.6	1.6
8/3	Circulatory North Right	B	31	42	9	243	1950	975	24.9%	7.5	1.5
9/1	Circulatory East Ahead	-	-	-	-	679	1950	1950	34.8%	1.4	0.3
9/2	Circulatory East Ahead	-	-	-	-	751	1950	1950	38.5%	1.5	0.3
9/3	Circulatory East Right	-	-	-	-	346	1950	1950	17.7%	1.1	0.1
14/1	Circulatory SE Right	-	-	-	-	387	1950	1950	19.8%	1.2	0.1
14/2	Circulatory SE Right	-	-	-	-	352	1950	1950	18.1%	1.1	0.1
C1 Stream: 1	PRC for Signalled Lanes (%):			1.3	Total Delay for Signalled Lanes (pcuHr):			17.45		Cycle Time (s): 64	
C1 Stream: 2	PRC for Signalled Lanes (%):			3.7	Total Delay for Signalled Lanes (pcuHr):			26.64		Cycle Time (s): 64	
	PRC Over All Lanes (%):			1.3	Total Delay Over All Lanes (pcuHr):			51.82			

Scenario 6: '2025 Base + Comm + 40 Acres + Dev (B8), PM'

(FG6: '2025 Base + Comm + 40 Acres + Dev (B8), PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	93	925	0	346	1364
	B	75	0	425	0	318	818
	C	1119	51	0	0	370	1540
	D	5	404	193	0	114	716
	E	318	387	301	0	0	1006
	Tot.	1517	935	1844	0	1148	5444

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	24	34
Change Point	15	46

Stage Stream: 2

Stage	1	2
Duration	25	33
Change Point	44	4

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	88.8%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	88.8%	-	-
1/1	A3 NB Off-Slip Left	D	25	51	4	114	1950	704	16.2%	18.7	1.6
1/2	A3 NB Off-Slip Ahead	D	25	51	4	602	1950	704	85.5%	38.0	13.8
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	705	1950:1950	565+464	68.5 : 68.5%	8.3	4.7
2/3	A2030 Havant Road Ahead	-	-	-	-	301	1950	565	53.3%	9.3	3.0
3/2+3/1	A3 SB Off-Slip Ahead Left	A	24	22	46	1018	1950:1950	576+582	87.9 : 87.9%	33.0	12.4
3/3	A3 SB Off-Slip Ahead	A	24	22	46	346	1950	677	51.1%	24.1	6.0
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	818	1950:1950	833+878	47.2 : 48.4%	5.1	3.5
5/1	A27 Link Left	-	-	-	-	370	1950	1031	35.9%	2.7	0.3
5/2+5/3	A27 Link Left	-	-	-	-	1170	1950:1950	572+895	79.7 : 79.7%	6.2	5.5
6/1	Circulatory South Ahead	C	33	11	44	761	1950	921	82.6%	29.7	14.4
6/2	Circulatory South Right Ahead	C	33	11	44	767	1950	921	83.3%	29.3	15.0
6/3	Circulatory South Right	C	33	11	44	751	1950	921	81.6%	26.8	15.2
7/1	Circulatory West Ahead	-	-	-	-	499	1950	1950	25.6%	1.2	0.2
7/2	Circulatory West Right Ahead	-	-	-	-	1348	1950	1950	69.1%	3.0	1.1
8/1	Circulatory North Ahead	B	34	53	15	842	1950	948	88.8%	25.3	11.9
8/2	Circulatory North Right	B	34	53	15	254	1950	948	26.8%	10.6	1.9
8/3	Circulatory North Right	B	34	53	15	240	1950	948	25.3%	10.5	1.7
9/1	Circulatory East Ahead	-	-	-	-	673	1950	1950	34.5%	1.4	0.3
9/2	Circulatory East Ahead	-	-	-	-	746	1950	1950	38.3%	1.5	0.3
9/3	Circulatory East Right	-	-	-	-	346	1950	1950	17.7%	1.1	0.1
14/1	Circulatory SE Right	-	-	-	-	391	1950	1950	20.1%	1.2	0.1
14/2	Circulatory SE Right	-	-	-	-	348	1950	1950	17.8%	1.1	0.1
C1 Stream: 1	PRC for Signalled Lanes (%):			1.3	Total Delay for Signalled Lanes (pcuHr):			19.02	Cycle Time (s): 72		
C1 Stream: 2	PRC for Signalled Lanes (%):			5.3	Total Delay for Signalled Lanes (pcuHr):			25.04	Cycle Time (s): 72		
	PRC Over All Lanes (%):			1.3	Total Delay Over All Lanes(pcuHr):			52.12			

Scenario 7: '2025 Base + Comm + 40 Acres + Dev (Yodel), PM'

(FG7: '2025 Base + Comm + 40 Acres + Dev (Yodel), PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	93	923	0	346	1362
	B	75	0	424	0	318	817
	C	1123	53	0	0	371	1547
	D	5	404	191	0	114	714
	E	318	387	301	0	0	1006
	Tot.	1521	937	1839	0	1149	5446

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	24	34
Change Point	15	46

Stage Stream: 2

Stage	1	2
Duration	24	34
Change Point	43	2

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	89.0%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	89.0%	-	-
1/1	A3 NB Off-Slip Left	D	24	50	2	114	1950	677	16.8%	19.5	1.7
1/2	A3 NB Off-Slip Ahead	D	24	50	2	600	1950	677	88.6%	43.5	14.7
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	705	1950:1950	564+463	68.6 : 68.6%	8.2	4.7
2/3	A2030 Havant Road Ahead	-	-	-	-	301	1950	564	53.4%	9.1	3.0
3/2+3/1	A3 SB Off-Slip Ahead Left	A	24	22	46	1016	1950:1950	576+582	87.7 : 87.7%	32.9	12.4
3/3	A3 SB Off-Slip Ahead	A	24	22	46	346	1950	677	51.1%	24.1	6.0
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	817	1950:1950	834+880	47.1 : 48.2%	5.1	3.5
5/1	A27 Link Left	-	-	-	-	371	1950	1031	36.0%	2.7	0.3
5/2+5/3	A27 Link Left	-	-	-	-	1176	1950:1950	567+895	80.4 : 80.4%	6.4	5.8
6/1	Circulatory South Ahead	C	34	9	43	763	1950	948	80.5%	28.2	14.2
6/2	Circulatory South Right Ahead	C	34	9	43	770	1950	948	81.2%	27.4	14.7
6/3	Circulatory South Right	C	34	9	43	753	1950	948	79.4%	24.5	14.5
7/1	Circulatory West Ahead	-	-	-	-	503	1950	1950	25.8%	1.2	0.2
7/2	Circulatory West Right Ahead	-	-	-	-	1348	1950	1950	69.1%	3.0	1.1
8/1	Circulatory North Ahead	B	34	53	15	844	1950	948	89.0%	24.9	12.0
8/2	Circulatory North Right	B	34	53	15	252	1950	948	26.6%	10.0	1.9
8/3	Circulatory North Right	B	34	53	15	240	1950	948	25.3%	9.9	1.7
9/1	Circulatory East Ahead	-	-	-	-	670	1950	1950	34.4%	1.4	0.3
9/2	Circulatory East Ahead	-	-	-	-	745	1950	1950	38.2%	1.5	0.3
9/3	Circulatory East Right	-	-	-	-	346	1950	1950	17.7%	1.1	0.1
14/1	Circulatory SE Right	-	-	-	-	392	1950	1950	20.1%	1.2	0.1
14/2	Circulatory SE Right	-	-	-	-	347	1950	1950	17.8%	1.1	0.1
C1 Stream: 1	PRC for Signalled Lanes (%):			1.1	Total Delay for Signalled Lanes (pcuHr):			18.78	Cycle Time (s): 72		
C1 Stream: 2	PRC for Signalled Lanes (%):			1.6	Total Delay for Signalled Lanes (pcuHr):			24.85	Cycle Time (s): 72		
	PRC Over All Lanes (%):			1.1	Total Delay Over All Lanes (pcuHr):			51.72			

Scenario 8: '2025 Base + Comm + 40 Acres + Dev (Amazon wPoyle&Norwich), PM'

(FG8: '2025 Base + Comm + 40 Acres + Dev (Amazon wPoyle&Norwich), PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	93	955	0	346	1394
	B	75	0	439	0	318	832
	C	1169	76	0	0	384	1629
	D	5	404	232	0	114	755
	E	318	387	309	0	0	1014
	Tot.	1567	960	1935	0	1162	5624

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	19	31
Change Point	21	47

Stage Stream: 2

Stage	1	2
Duration	22	28
Change Point	37	2

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	91.5%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	91.5%	-	-
1/1	A3 NB Off-Slip Left	D	22	44	2	114	1950	701	16.3%	17.0	1.5
1/2	A3 NB Off-Slip Ahead	D	22	44	2	641	1950	701	91.5%	45.6	15.5
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	705	1950:1950	528+433	73.4 : 73.4%	9.5	4.9
2/3	A2030 Havant Road Ahead	-	-	-	-	309	1950	528	58.6%	10.5	3.1
3/2+3/1	A3 SB Off-Slip Ahead Left	A	19	28	47	1048	1950:1950	572+578	91.1 : 91.1%	36.8	13.5
3/3	A3 SB Off-Slip Ahead	A	19	28	47	346	1950	609	56.8%	25.2	5.7
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	832	1950:1950	804+844	48.9 : 52.0%	5.3	3.6
5/1	A27 Link Left	-	-	-	-	361	1950	1017	35.5%	2.7	0.3
5/2+5/3	A27 Link Left	-	-	-	-	1268	1950:1950	635+895	82.9 : 82.9%	7.0	6.3
6/1	Circulatory South Ahead	C	28	9	37	789	1950	884	89.3%	37.6	17.1
6/2	Circulatory South Right Ahead	C	28	9	37	794	1950	884	89.9%	36.2	17.2
6/3	Circulatory South Right	C	28	9	37	785	1950	884	88.8%	32.4	16.4
7/1	Circulatory West Ahead	-	-	-	-	540	1950	1950	27.7%	1.3	0.2
7/2	Circulatory West Right Ahead	-	-	-	-	1421	1950	1950	72.9%	3.4	1.3
8/1	Circulatory North Ahead	B	31	54	21	867	1950	975	88.9%	22.0	15.7
8/2	Circulatory North Right	B	31	54	21	279	1950	975	28.6%	7.0	1.5
8/3	Circulatory North Right	B	31	54	21	262	1950	975	26.9%	7.0	1.4
9/1	Circulatory East Ahead	-	-	-	-	713	1950	1950	36.6%	1.5	0.3
9/2	Circulatory East Ahead	-	-	-	-	783	1950	1950	40.2%	1.5	0.3
9/3	Circulatory East Right	-	-	-	-	346	1950	1950	17.7%	1.1	0.1
14/1	Circulatory SE Right	-	-	-	-	428	1950	1950	21.9%	1.2	0.1
14/2	Circulatory SE Right	-	-	-	-	311	1950	1950	15.9%	1.1	0.1
C1 Stream: 1	PRC for Signalled Lanes (%):		-1.2	Total Delay for Signalled Lanes (pcuHr):		19.48	Cycle Time (s):		64		
C1 Stream: 2	PRC for Signalled Lanes (%):		-1.6	Total Delay for Signalled Lanes (pcuHr):		31.98	Cycle Time (s):		64		
	PRC Over All Lanes (%):		-1.6	Total Delay Over All Lanes(pcuHr):		60.66					

Scenario 9: '2025 Base + Comm + 40 Acres + Dev (Amazon wPoyle&Norwich 3 Unit Test), PM'

(FG9: '2025 Base + Comm + 40 Acres + Dev (Amazon wPoyle&Norwich 3 Unit Test), PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	93	940	0	346	1379
	B	75	0	432	0	318	825
	C	1151	67	0	0	379	1597
	D	5	404	213	0	114	736
	E	318	387	305	0	0	1010
	Tot.	1549	951	1890	0	1157	5547

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	19	31
Change Point	17	43

Stage Stream: 2

Stage	1	2
Duration	22	28
Change Point	34	63

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	89.8%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	89.8%	-	-
1/1	A3 NB Off-Slip Left	D	22	41	63	114	1950	701	16.3%	17.0	1.5
1/2	A3 NB Off-Slip Ahead	D	22	41	63	622	1950	701	88.8%	40.2	14.0
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	705	1950:1950	543+446	71.3 : 71.3%	8.7	4.7
2/3	A2030 Havant Road Ahead	-	-	-	-	305	1950	543	56.2%	9.7	2.9
3/2+3/1	A3 SB Off-Slip Ahead Left	A	19	24	43	1033	1950:1950	571+579	89.8 : 89.8%	34.9	12.6
3/3	A3 SB Off-Slip Ahead	A	19	24	43	346	1950	609	56.8%	25.2	5.7
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	825	1950:1950	820+861	47.9 : 50.2%	5.0	3.2
5/1	A27 Link Left	-	-	-	-	325	1950	1008	32.2%	2.6	0.2
5/2+5/3	A27 Link Left	-	-	-	-	1272	1950:1950	658+895	81.9 : 81.9%	6.5	5.9
6/1	Circulatory South Ahead	C	28	6	34	775	1950	884	87.7%	36.3	16.4
6/2	Circulatory South Right Ahead	C	28	6	34	785	1950	884	88.8%	34.4	16.5
6/3	Circulatory South Right	C	28	6	34	776	1950	884	87.8%	31.1	15.9
7/1	Circulatory West Ahead	-	-	-	-	522	1950	1950	26.8%	1.3	0.2
7/2	Circulatory West Right Ahead	-	-	-	-	1393	1950	1950	71.4%	3.2	1.2
8/1	Circulatory North Ahead	B	31	50	17	858	1950	975	88.0%	20.7	13.8
8/2	Circulatory North Right	B	31	50	17	268	1950	975	27.5%	7.3	1.5
8/3	Circulatory North Right	B	31	50	17	250	1950	975	25.6%	7.3	1.4
9/1	Circulatory East Ahead	-	-	-	-	695	1950	1950	35.6%	1.4	0.3
9/2	Circulatory East Ahead	-	-	-	-	763	1950	1950	39.1%	1.5	0.3
9/3	Circulatory East Right	-	-	-	-	346	1950	1950	17.7%	1.1	0.1
14/1	Circulatory SE Right	-	-	-	-	450	1950	1950	23.1%	1.2	0.1
14/2	Circulatory SE Right	-	-	-	-	289	1950	1950	14.8%	1.1	0.1
C1 Stream: 1	PRC for Signalled Lanes (%):		0.2		Total Delay for Signalled Lanes (pcuHr):		18.41		Cycle Time (s): 64		
C1 Stream: 2	PRC for Signalled Lanes (%):		1.3		Total Delay for Signalled Lanes (pcuHr):		29.51		Cycle Time (s): 64		
	PRC Over All Lanes (%):		0.2		Total Delay Over All Lanes (pcuHr):		56.50				

Scenario 10: '2025 Base + Comm + 40 Acres + Dev (Amazon Full Dev), PM'

(FG10: '2025 Base + Comm + 40 Acres + Dev (Amazon Full Dev), PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	93	945	0	346	1384
	B	75	0	435	0	318	828
	C	1142	62	0	0	377	1581
	D	5	404	220	0	114	743
	E	318	387	307	0	0	1012
	Tot.	1540	946	1907	0	1155	5548

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	22	32
Change Point	11	40

Stage Stream: 2

Stage	1	2
Duration	24	30
Change Point	31	62

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	90.1%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	90.1%	-	-
1/1	A3 NB Off-Slip Left	D	24	38	62	114	1950	717	15.9%	17.5	1.5
1/2	A3 NB Off-Slip Ahead	D	24	38	62	629	1950	717	87.7%	39.1	14.3
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	705	1950:1950	545+448	71.0 : 71.0%	8.7	4.8
2/3	A2030 Havant Road Ahead	-	-	-	-	307	1950	545	56.3%	9.8	3.1
3/2+3/1	A3 SB Off-Slip Ahead Left	A	22	18	40	1038	1950:1950	581+588	88.8 : 88.8%	33.3	12.6
3/3	A3 SB Off-Slip Ahead	A	22	18	40	346	1950	660	52.5%	23.8	5.7
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	828	1950:1950	810+855	48.5 : 50.9%	5.3	3.5
5/1	A27 Link Left	-	-	-	-	354	1950	1021	34.7%	2.7	0.3
5/2+5/3	A27 Link Left	-	-	-	-	1227	1950:1950	616+895	81.2 : 81.2%	6.4	5.8
6/1	Circulatory South Ahead	C	30	1	31	770	1950	889	86.6%	36.9	16.7
6/2	Circulatory South Right Ahead	C	30	1	31	779	1950	889	87.6%	34.4	16.9
6/3	Circulatory South Right	C	30	1	31	771	1950	889	86.7%	30.6	16.2
7/1	Circulatory West Ahead	-	-	-	-	513	1950	1950	26.3%	1.3	0.2
7/2	Circulatory West Right Ahead	-	-	-	-	1395	1950	1950	71.5%	3.2	1.3
8/1	Circulatory North Ahead	B	32	47	11	853	1950	946	90.1%	24.8	16.2
8/2	Circulatory North Right	B	32	47	11	272	1950	946	28.7%	8.1	1.6
8/3	Circulatory North Right	B	32	47	11	255	1950	946	26.9%	8.0	1.5
9/1	Circulatory East Ahead	-	-	-	-	701	1950	1950	35.9%	1.4	0.3
9/2	Circulatory East Ahead	-	-	-	-	771	1950	1950	39.5%	1.5	0.3
9/3	Circulatory East Right	-	-	-	-	346	1950	1950	17.7%	1.1	0.1
14/1	Circulatory SE Right	-	-	-	-	416	1950	1950	21.3%	1.2	0.1
14/2	Circulatory SE Right	-	-	-	-	323	1950	1950	16.6%	1.1	0.1
C1 Stream: 1	PRC for Signalled Lanes (%):		-0.2		Total Delay for Signalled Lanes (pcuHr):		18.95		Cycle Time (s): 68		
C1 Stream: 2	PRC for Signalled Lanes (%):		2.6		Total Delay for Signalled Lanes (pcuHr):		29.28		Cycle Time (s): 68		
	PRC Over All Lanes (%):		-0.2		Total Delay Over All Lanes (pcuHr):		56.82				

Scenario 11: '2025 Base + Comm + 40 Acres + Dev (Yodel Full Dev), PM'

(FG11: '2025 Base + Comm + 40 Acres + Dev (Yodel Full Dev), PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	93	926	0	346	1365
	B	75	0	425	0	318	818
	C	1122	53	0	0	371	1546
	D	5	404	195	0	114	718
	E	318	387	301	0	0	1006
	Tot.	1520	937	1847	0	1149	5453

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	17	29
Change Point	7	31

Stage Stream: 2

Stage	1	2
Duration	20	26
Change Point	22	49

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	88.5%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	88.5%	-	-
1/1	A3 NB Off-Slip Left	D	20	29	49	114	1950	682	16.7%	16.7	1.4
1/2	A3 NB Off-Slip Ahead	D	20	29	49	604	1950	682	88.5%	39.4	12.9
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	705	1950:1950	563+463	68.8 : 68.8%	7.4	4.2
2/3	A2030 Havant Road Ahead	-	-	-	-	301	1950	563	53.5%	8.3	2.5
3/2+3/1	A3 SB Off-Slip Ahead Left	A	17	14	31	1019	1950:1950	578+584	87.6 : 87.6%	31.9	11.4
3/3	A3 SB Off-Slip Ahead	A	17	14	31	346	1950	585	59.1%	25.4	5.6
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	818	1950:1950	835+876	47.1 : 48.5%	4.7	3.2
5/1	A27 Link Left	-	-	-	-	328	1950	1016	32.3%	2.6	0.2
5/2+5/3	A27 Link Left	-	-	-	-	1218	1950:1950	634+895	79.6 : 79.6%	5.9	5.1
6/1	Circulatory South Ahead	C	26	56	22	758	1950	878	86.4%	32.8	14.8
6/2	Circulatory South Right Ahead	C	26	56	22	770	1950	878	87.7%	32.0	15.1
6/3	Circulatory South Right	C	26	56	22	757	1950	878	86.3%	28.6	14.1
7/1	Circulatory West Ahead	-	-	-	-	498	1950	1950	25.5%	1.2	0.2
7/2	Circulatory West Right Ahead	-	-	-	-	1356	1950	1950	69.5%	3.0	1.1
8/1	Circulatory North Ahead	B	29	38	7	844	1950	975	86.6%	18.8	10.7
8/2	Circulatory North Right	B	29	38	7	258	1950	975	26.5%	7.4	1.5
8/3	Circulatory North Right	B	29	38	7	238	1950	975	24.4%	7.3	1.4
9/1	Circulatory East Ahead	-	-	-	-	677	1950	1950	34.7%	1.4	0.3
9/2	Circulatory East Ahead	-	-	-	-	745	1950	1950	38.2%	1.5	0.3
9/3	Circulatory East Right	-	-	-	-	346	1950	1950	17.7%	1.1	0.1
14/1	Circulatory SE Right	-	-	-	-	430	1950	1950	22.1%	1.2	0.1
14/2	Circulatory SE Right	-	-	-	-	309	1950	1950	15.8%	1.1	0.1
C1 Stream: 1	PRC for Signalled Lanes (%):			2.7	Total Delay for Signalled Lanes (pcuHr):			16.88	Cycle Time (s): 60		
C1 Stream: 2	PRC for Signalled Lanes (%):			1.7	Total Delay for Signalled Lanes (pcuHr):			26.92	Cycle Time (s): 60		
	PRC Over All Lanes (%):			1.7	Total Delay Over All Lanes (pcuHr):			51.46			

Scenario 13: '2030 Base + Comm + 40 Acres, PM'

(FG13: '2030 Base + Comm + 40 Acres, PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	99	968	0	364	1431
	B	80	0	444	0	336	860
	C	1171	48	0	0	387	1606
	D	5	427	192	0	119	743
	E	335	409	313	0	0	1057
	Tot.	1591	983	1917	0	1206	5697

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	17	29
Change Point	17	41

Stage Stream: 2

Stage	1	2
Duration	20	26
Change Point	33	0

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	91.9%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	91.9%	-	-
1/1	A3 NB Off-Slip Left	D	20	40	0	119	1950	682	17.4%	16.7	1.5
1/2	A3 NB Off-Slip Ahead	D	20	40	0	624	1950	682	91.4%	45.2	14.5
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	744	1950:1950	540+442	75.7 : 75.7%	9.7	5.2
2/3	A2030 Havant Road Ahead	-	-	-	-	313	1950	540	58.0%	9.6	2.9
3/2+3/1	A3 SB Off-Slip Ahead Left	A	17	24	41	1067	1950:1950	577+585	91.9 : 91.9%	37.4	13.6
3/3	A3 SB Off-Slip Ahead	A	17	24	41	364	1950	585	62.2%	26.2	6.0
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	860	1950:1950	815+854	51.0 : 52.0%	5.3	3.8
5/1	A27 Link Left	-	-	-	-	387	1950	1024	37.8%	2.8	0.3
5/2+5/3	A27 Link Left	-	-	-	-	1219	1950:1950	567+879	84.3 : 84.3%	8.0	8.0
6/1	Circulatory South Ahead	C	26	7	33	796	1950	878	90.7%	38.5	17.0
6/2	Circulatory South Right Ahead	C	26	7	33	805	1950	878	91.7%	39.2	17.6
6/3	Circulatory South Right	C	26	7	33	785	1950	878	89.5%	32.5	15.9
7/1	Circulatory West Ahead	-	-	-	-	519	1950	1950	26.6%	1.3	0.2
7/2	Circulatory West Right Ahead	-	-	-	-	1404	1950	1950	72.0%	3.3	1.3
8/1	Circulatory North Ahead	B	29	48	17	884	1950	975	90.7%	23.8	12.6
8/2	Circulatory North Right	B	29	48	17	260	1950	975	26.7%	7.8	1.4
8/3	Circulatory North Right	B	29	48	17	245	1950	975	25.1%	7.7	1.3
9/1	Circulatory East Ahead	-	-	-	-	698	1950	1950	35.8%	1.4	0.3
9/2	Circulatory East Ahead	-	-	-	-	775	1950	1950	39.7%	1.5	0.3
9/3	Circulatory East Right	-	-	-	-	364	1950	1950	18.7%	1.1	0.1
14/1	Circulatory SE Right	-	-	-	-	409	1950	1950	21.0%	1.2	0.1
14/2	Circulatory SE Right	-	-	-	-	371	1950	1950	19.0%	1.1	0.1
C1 Stream: 1	PRC for Signalled Lanes (%):		-2.1	Total Delay for Signalled Lanes (pcuHr):		20.68	Cycle Time (s):		60		
C1 Stream: 2	PRC for Signalled Lanes (%):		-1.9	Total Delay for Signalled Lanes (pcuHr):		32.75	Cycle Time (s):		60		
	PRC Over All Lanes (%):		-2.1	Total Delay Over All Lanes(pcuHr):		63.00					

Scenario 14: '2030 Base + Comm + 40 Acres + Dev (Amazon), PM'

(FG14: '2030 Base + Comm + 40 Acres + Dev (Amazon), PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	99	987	0	364	1450
	B	80	0	453	0	336	869
	C	1198	62	0	0	394	1654
	D	5	427	216	0	119	767
	E	335	409	318	0	0	1062
	Tot.	1618	997	1974	0	1213	5802

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	18	30
Change Point	42	5

Stage Stream: 2

Stage	1	2
Duration	21	27
Change Point	55	21

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	93.9%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	93.9%	-	-
1/1	A3 NB Off-Slip Left	D	21	0	21	119	1950	692	17.2%	16.9	1.5
1/2	A3 NB Off-Slip Ahead	D	21	0	21	648	1950	692	93.7%	51.7	16.4
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	744	1950:1950	519+425	78.9 : 78.9%	11.6	6.1
2/3	A2030 Havant Road Ahead	-	-	-	-	318	1950	519	61.3%	11.2	3.3
3/2+3/1	A3 SB Off-Slip Ahead Left	A	18	49	5	1086	1950:1950	575+581	93.9 : 93.9%	42.3	15.5
3/3	A3 SB Off-Slip Ahead	A	18	49	5	364	1950	598	60.9%	26.0	6.0
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	869	1950:1950	795+833	52.3 : 54.4%	5.8	4.1
5/1	A27 Link Left	-	-	-	-	383	1950	1016	37.7%	2.8	0.3
5/2+5/3	A27 Link Left	-	-	-	-	1271	1950:1950	597+879	86.1 : 86.1%	8.8	9.1
6/1	Circulatory South Ahead	C	27	28	55	813	1950	881	92.3%	41.9	18.6
6/2	Circulatory South Right Ahead	C	27	28	55	816	1950	881	92.7%	40.9	18.7
6/3	Circulatory South Right	C	27	28	55	805	1950	881	91.4%	36.3	17.5
7/1	Circulatory West Ahead	-	-	-	-	540	1950	1950	27.7%	1.3	0.2
7/2	Circulatory West Right Ahead	-	-	-	-	1448	1950	1950	74.3%	3.6	1.4
8/1	Circulatory North Ahead	B	30	12	42	898	1950	975	92.1%	27.0	19.4
8/2	Circulatory North Right	B	30	12	42	277	1950	975	28.4%	6.7	1.5
8/3	Circulatory North Right	B	30	12	42	257	1950	975	26.4%	6.7	1.4
9/1	Circulatory East Ahead	-	-	-	-	724	1950	1950	37.1%	1.5	0.3
9/2	Circulatory East Ahead	-	-	-	-	797	1950	1950	40.9%	1.6	0.3
9/3	Circulatory East Right	-	-	-	-	364	1950	1950	18.7%	1.1	0.1
14/1	Circulatory SE Right	-	-	-	-	430	1950	1950	22.1%	1.2	0.1
14/2	Circulatory SE Right	-	-	-	-	350	1950	1950	17.9%	1.1	0.1
C1 Stream: 1	PRC for Signalled Lanes (%):		-4.4	Total Delay for Signalled Lanes (pcuHr):		23.12		Cycle Time (s): 62			
C1 Stream: 2	PRC for Signalled Lanes (%):		-4.1	Total Delay for Signalled Lanes (pcuHr):		36.70		Cycle Time (s): 62			
	PRC Over All Lanes (%):		-4.4	Total Delay Over All Lanes(pcuHr):		70.67					

Scenario 15: '2030 Base + Comm + 40 Acres + Dev (TNT), PM'

(FG15: '2030 Base + Comm + 40 Acres + Dev (TNT), PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	99	981	0	364	1444
	B	80	0	451	0	336	867
	C	1179	52	0	0	389	1620
	D	5	427	209	0	119	760
	E	335	409	317	0	0	1061
	Tot.	1599	987	1958	0	1208	5752

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	22	32
Change Point	60	21

Stage Stream: 2

Stage	1	2
Duration	23	31
Change Point	7	37

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	93.8%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	93.8%	-	-
1/1	A3 NB Off-Slip Left	D	23	14	37	119	1950	688	17.3%	18.3	1.6
1/2	A3 NB Off-Slip Ahead	D	23	14	37	641	1950	688	93.1%	52.1	17.1
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	744	1950:1950	531+435	77.1 : 77.1%	10.7	5.7
2/3	A2030 Havant Road Ahead	-	-	-	-	317	1950	531	59.8%	10.6	3.4
3/2+3/1	A3 SB Off-Slip Ahead Left	A	22	67	21	1080	1950:1950	582+588	92.3 : 92.3%	38.5	14.7
3/3	A3 SB Off-Slip Ahead	A	22	67	21	364	1950	660	55.2%	24.4	6.2
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	867	1950:1950	796+839	52.3 : 53.7%	5.9	4.4
5/1	A27 Link Left	-	-	-	-	381	1950	1019	37.4%	2.8	0.3
5/2+5/3	A27 Link Left	-	-	-	-	1239	1950:1950	581+879	84.8 : 84.8%	8.2	9.4
6/1	Circulatory South Ahead	C	31	44	7	802	1950	918	87.4%	34.9	17.5
6/2	Circulatory South Right Ahead	C	31	44	7	803	1950	918	87.5%	32.6	17.2
6/3	Circulatory South Right	C	31	44	7	795	1950	918	86.6%	29.3	16.3
7/1	Circulatory West Ahead	-	-	-	-	521	1950	1950	26.7%	1.3	0.2
7/2	Circulatory West Right Ahead	-	-	-	-	1431	1950	1950	73.4%	3.4	1.4
8/1	Circulatory North Ahead	B	32	28	60	888	1950	946	93.8%	33.5	22.3
8/2	Circulatory North Right	B	32	28	60	273	1950	946	28.8%	7.5	1.9
8/3	Circulatory North Right	B	32	28	60	253	1950	946	26.7%	7.5	1.8
9/1	Circulatory East Ahead	-	-	-	-	717	1950	1950	36.8%	1.5	0.3
9/2	Circulatory East Ahead	-	-	-	-	790	1950	1950	40.5%	1.6	0.3
9/3	Circulatory East Right	-	-	-	-	364	1950	1950	18.7%	1.1	0.1
14/1	Circulatory SE Right	-	-	-	-	421	1950	1950	21.6%	1.2	0.1
14/2	Circulatory SE Right	-	-	-	-	359	1950	1950	18.4%	1.1	0.1
C1 Stream: 1	PRC for Signalled Lanes (%):		-4.3	Total Delay for Signalled Lanes (pcuHr):		23.39	Cycle Time (s):		68		
C1 Stream: 2	PRC for Signalled Lanes (%):		-3.5	Total Delay for Signalled Lanes (pcuHr):		31.41	Cycle Time (s):		68		
	PRC Over All Lanes (%):		-4.3	Total Delay Over All Lanes(pcuHr):		65.06					

Scenario 16: '2030 Base + Comm + 40 Acres + Dev (B8), PM'

(FG16: '2030 Base + Comm + 40 Acres + Dev (B8), PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	99	977	0	364	1440
	B	80	0	449	0	336	865
	C	1183	54	0	0	390	1627
	D	5	427	203	0	119	754
	E	335	409	316	0	0	1060
	Tot.	1603	989	1945	0	1209	5746

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	24	34
Change Point	17	48

Stage Stream: 2

Stage	1	2
Duration	24	34
Change Point	43	2

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	93.9%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	93.9%	-	-
1/1	A3 NB Off-Slip Left	D	24	50	2	119	1950	677	17.6%	19.6	1.8
1/2	A3 NB Off-Slip Ahead	D	24	50	2	635	1950	677	93.8%	56.2	18.1
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	744	1950:1950	531+435	77.1 : 77.1%	11.4	6.0
2/3	A2030 Havant Road Ahead	-	-	-	-	316	1950	531	59.6%	11.2	3.5
3/2+3/1	A3 SB Off-Slip Ahead Left	A	24	24	48	1076	1950:1950	576+582	92.9 : 92.9%	40.4	15.9
3/3	A3 SB Off-Slip Ahead	A	24	24	48	364	1950	677	53.8%	24.6	6.3
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	865	1950:1950	801+845	51.9 : 53.2%	6.0	4.4
5/1	A27 Link Left	-	-	-	-	388	1950	1023	37.9%	2.8	0.3
5/2+5/3	A27 Link Left	-	-	-	-	1239	1950:1950	571+879	85.4 : 85.4%	8.7	10.4
6/1	Circulatory South Ahead	C	34	9	43	800	1950	948	84.4%	32.7	16.4
6/2	Circulatory South Right Ahead	C	34	9	43	811	1950	948	85.6%	30.9	17.0
6/3	Circulatory South Right	C	34	9	43	796	1950	948	84.0%	26.9	16.3
7/1	Circulatory West Ahead	-	-	-	-	526	1950	1950	27.0%	1.3	0.2
7/2	Circulatory West Right Ahead	-	-	-	-	1426	1950	1950	73.1%	3.4	1.4
8/1	Circulatory North Ahead	B	34	55	17	890	1950	948	93.9%	33.5	17.2
8/2	Circulatory North Right	B	34	55	17	268	1950	948	28.3%	9.3	1.8
8/3	Circulatory North Right	B	34	55	17	251	1950	948	26.5%	9.2	1.6
9/1	Circulatory East Ahead	-	-	-	-	710	1950	1950	36.4%	1.5	0.3
9/2	Circulatory East Ahead	-	-	-	-	786	1950	1950	40.3%	1.5	0.3
9/3	Circulatory East Right	-	-	-	-	364	1950	1950	18.7%	1.1	0.1
14/1	Circulatory SE Right	-	-	-	-	412	1950	1950	21.1%	1.2	0.1
14/2	Circulatory SE Right	-	-	-	-	368	1950	1950	18.9%	1.1	0.1
C1 Stream: 1	PRC for Signalled Lanes (%):		-4.3	Total Delay for Signalled Lanes (pcuHr):		24.19	Cycle Time (s):		72		
C1 Stream: 2	PRC for Signalled Lanes (%):		-4.2	Total Delay for Signalled Lanes (pcuHr):		30.71	Cycle Time (s):		72		
	PRC Over All Lanes (%):		-4.3	Total Delay Over All Lanes (pcuHr):		65.49					

Scenario 17: '2030 Base + Comm + 40 Acres + Dev (Yodel), PM'

(FG17: '2030 Base + Comm + 40 Acres + Dev (Yodel), PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	99	975	0	364	1438
	B	80	0	448	0	336	864
	C	1186	56	0	0	391	1633
	D	5	427	201	0	119	752
	E	335	409	315	0	0	1059
	Tot.	1606	991	1939	0	1210	5746

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	24	34
Change Point	3	34

Stage Stream: 2

Stage	1	2
Duration	24	34
Change Point	30	61

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	94.1%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	94.1%	-	-
1/1	A3 NB Off-Slip Left	D	24	37	61	119	1950	677	17.6%	19.6	1.8
1/2	A3 NB Off-Slip Ahead	D	24	37	61	633	1950	677	93.5%	55.2	17.8
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	744	1950:1950	530+434	77.2 : 77.2%	11.6	6.0
2/3	A2030 Havant Road Ahead	-	-	-	-	315	1950	530	59.5%	11.4	3.5
3/2+3/1	A3 SB Off-Slip Ahead Left	A	24	10	34	1074	1950:1950	576+582	92.7 : 92.7%	40.1	15.8
3/3	A3 SB Off-Slip Ahead	A	24	10	34	364	1950	677	53.8%	24.6	6.3
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	864	1950:1950	803+847	51.8 : 52.9%	5.9	4.1
5/1	A27 Link Left	-	-	-	-	387	1950	1021	37.9%	2.8	0.3
5/2+5/3	A27 Link Left	-	-	-	-	1246	1950:1950	578+879	85.5 : 85.5%	8.7	10.4
6/1	Circulatory South Ahead	C	34	68	30	805	1950	948	84.9%	32.5	16.3
6/2	Circulatory South Right Ahead	C	34	68	30	811	1950	948	85.6%	30.6	16.7
6/3	Circulatory South Right	C	34	68	30	797	1950	948	84.1%	27.1	16.4
7/1	Circulatory West Ahead	-	-	-	-	530	1950	1950	27.2%	1.3	0.2
7/2	Circulatory West Right Ahead	-	-	-	-	1425	1950	1950	73.1%	3.4	1.4
8/1	Circulatory North Ahead	B	34	41	3	892	1950	948	94.1%	34.6	17.3
8/2	Circulatory North Right	B	34	41	3	266	1950	948	28.1%	9.8	1.7
8/3	Circulatory North Right	B	34	41	3	250	1950	948	26.4%	9.7	1.6
9/1	Circulatory East Ahead	-	-	-	-	707	1950	1950	36.3%	1.4	0.3
9/2	Circulatory East Ahead	-	-	-	-	784	1950	1950	40.2%	1.5	0.3
9/3	Circulatory East Right	-	-	-	-	364	1950	1950	18.7%	1.1	0.1
14/1	Circulatory SE Right	-	-	-	-	418	1950	1950	21.4%	1.2	0.1
14/2	Circulatory SE Right	-	-	-	-	362	1950	1950	18.6%	1.1	0.1
C1	Stream: 1	PRC for Signalled Lanes (%):		-4.6	Total Delay for Signalled Lanes (pcuHr):			24.41		Cycle Time (s): 72	
C1	Stream: 2	PRC for Signalled Lanes (%):		-3.9	Total Delay for Signalled Lanes (pcuHr):			30.51		Cycle Time (s): 72	
		PRC Over All Lanes (%):		-4.6	Total Delay Over All Lanes (pcuHr):			65.57			

Scenario 18: '2030 Base + Comm + 40 Acres + Dev (Amazon wPoyle&Norwich), PM'

(FG18: '2030 Base + Comm + 40 Acres + Dev (Amazon wPoyle&Norwich), PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	99	1007	0	364	1470
	B	80	0	463	0	336	879
	C	1232	78	0	0	404	1714
	D	5	427	242	0	119	793
	E	335	409	324	0	0	1068
	Tot.	1652	1013	2036	0	1223	5924

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	28	38
Change Point	8	43

Stage Stream: 2

Stage	1	2
Duration	28	38
Change Point	39	74

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	97.1%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	97.1%	-	-
1/1	A3 NB Off-Slip Left	D	28	46	74	119	1950	707	16.8%	20.4	1.9
1/2	A3 NB Off-Slip Ahead	D	28	46	74	674	1950	707	95.3%	63.0	21.6
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	744	1950:1950	494+404	82.9 : 82.9%	16.7	8.7
2/3	A2030 Havant Road Ahead	-	-	-	-	324	1950	494	65.6%	15.6	4.5
3/2+3/1	A3 SB Off-Slip Ahead Left	A	28	15	43	1106	1950:1950	565+574	97.1 : 97.1%	56.5	24.5
3/3	A3 SB Off-Slip Ahead	A	28	15	43	364	1950	707	51.5%	25.2	6.8
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	879	1950:1950	760+807	54.8 : 57.4%	7.0	5.1
5/1	A27 Link Left	-	-	-	-	402	1950	1011	39.8%	3.0	0.3
5/2+5/3	A27 Link Left	-	-	-	-	1312	1950:1950	641+879	86.3 : 86.3%	8.8	11.7
6/1	Circulatory South Ahead	C	38	1	39	844	1950	951	88.8%	35.7	18.5
6/2	Circulatory South Right Ahead	C	38	1	39	844	1950	951	88.8%	35.0	19.6
6/3	Circulatory South Right	C	38	1	39	806	1950	951	84.8%	30.4	18.9
7/1	Circulatory West Ahead	-	-	-	-	589	1950	1950	30.2%	1.3	0.2
7/2	Circulatory West Right Ahead	-	-	-	-	1475	1950	1950	75.6%	3.8	1.5
8/1	Circulatory North Ahead	B	38	50	8	914	1950	951	96.1%	42.7	24.3
8/2	Circulatory North Right	B	38	50	8	292	1950	951	30.7%	9.6	1.8
8/3	Circulatory North Right	B	38	50	8	274	1950	951	28.8%	9.5	1.7
9/1	Circulatory East Ahead	-	-	-	-	750	1950	1950	38.5%	1.5	0.3
9/2	Circulatory East Ahead	-	-	-	-	823	1950	1950	42.2%	1.6	0.4
9/3	Circulatory East Right	-	-	-	-	364	1950	1950	18.7%	1.1	0.1
14/1	Circulatory SE Right	-	-	-	-	442	1950	1950	22.7%	1.2	0.1
14/2	Circulatory SE Right	-	-	-	-	338	1950	1950	17.3%	1.1	0.1
C1	Stream: 1	PRC for Signalled Lanes (%):		-7.9	Total Delay for Signalled Lanes (pcuHr):			32.25	Cycle Time (s): 80		
C1	Stream: 2	PRC for Signalled Lanes (%):		-5.9	Total Delay for Signalled Lanes (pcuHr):			35.85	Cycle Time (s): 80		
		PRC Over All Lanes (%):		-7.9	Total Delay Over All Lanes (pcuHr):			81.02			

Scenario 19: '2030 Base + Comm + 40 Acres + Dev (Amazon wPoyle&Norwich 3 Unit Test), PM'

(FG19: '2030 Base + Comm + 40 Acres + Dev (Amazon wPoyle&Norwich 3 Unit Test), PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	99	992	0	364	1455
	B	80	0	456	0	336	872
	C	1214	69	0	0	399	1682
	D	5	427	223	0	119	774
	E	335	409	320	0	0	1064
	Tot.	1634	1004	1991	0	1218	5847

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	26	36
Change Point	66	23

Stage Stream: 2

Stage	1	2
Duration	26	36
Change Point	19	52

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	95.3%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	95.3%	-	-
1/1	A3 NB Off-Slip Left	D	26	26	52	119	1950	693	17.2%	20.0	1.8
1/2	A3 NB Off-Slip Ahead	D	26	26	52	655	1950	693	94.5%	59.3	19.7
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	744	1950:1950	509+417	80.4 : 80.4%	14.0	7.3
2/3	A2030 Havant Road Ahead	-	-	-	-	320	1950	509	62.9%	13.5	4.1
3/2+3/1	A3 SB Off-Slip Ahead Left	A	26	73	23	1091	1950:1950	570+578	95.0 : 95.0%	47.0	19.6
3/3	A3 SB Off-Slip Ahead	A	26	73	23	364	1950	693	52.5%	24.9	6.6
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	872	1950:1950	780+826	53.3 : 55.2%	6.5	4.8
5/1	A27 Link Left	-	-	-	-	383	1950	1013	37.8%	2.9	0.3
5/2+5/3	A27 Link Left	-	-	-	-	1299	1950:1950	610+879	87.2 : 87.2%	9.6	11.8
6/1	Circulatory South Ahead	C	36	59	19	820	1950	949	86.4%	33.4	17.1
6/2	Circulatory South Right Ahead	C	36	59	19	826	1950	949	87.0%	32.4	18.0
6/3	Circulatory South Right	C	36	59	19	816	1950	949	86.0%	29.9	18.3
7/1	Circulatory West Ahead	-	-	-	-	552	1950	1950	28.3%	1.3	0.2
7/2	Circulatory West Right Ahead	-	-	-	-	1466	1950	1950	75.2%	3.7	1.5
8/1	Circulatory North Ahead	B	36	30	66	905	1950	949	95.3%	39.1	21.2
8/2	Circulatory North Right	B	36	30	66	282	1950	949	29.7%	9.7	1.8
8/3	Circulatory North Right	B	36	30	66	261	1950	949	27.5%	9.6	1.6
9/1	Circulatory East Ahead	-	-	-	-	732	1950	1950	37.5%	1.5	0.3
9/2	Circulatory East Ahead	-	-	-	-	803	1950	1950	41.2%	1.6	0.3
9/3	Circulatory East Right	-	-	-	-	364	1950	1950	18.7%	1.1	0.1
14/1	Circulatory SE Right	-	-	-	-	437	1950	1950	22.4%	1.2	0.1
14/2	Circulatory SE Right	-	-	-	-	343	1950	1950	17.6%	1.1	0.1
C1 Stream: 1	PRC for Signalled Lanes (%):		-5.9	Total Delay for Signalled Lanes (pcuHr):		28.03		Cycle Time (s): 76			
C1 Stream: 2	PRC for Signalled Lanes (%):		-5.1	Total Delay for Signalled Lanes (pcuHr):		33.30		Cycle Time (s): 76			
	PRC Over All Lanes (%):		-5.9	Total Delay Over All Lanes(pcuHr):		73.51					

Scenario 20: '2030 Base + Comm + 40 Acres + Dev (Amazon Full Dev), PM'

(FG20: '2030 Base + Comm + 40 Acres + Dev (Amazon Full Dev), PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	99	997	0	364	1460
	B	80	0	459	0	336	875
	C	1205	65	0	0	396	1666
	D	5	427	230	0	119	781
	E	335	409	321	0	0	1065
	Tot.	1625	1000	2007	0	1215	5847

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	28	38
Change Point	60	15

Stage Stream: 2

Stage	1	2
Duration	28	38
Change Point	11	46

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	96.2%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	96.2%	-	-
1/1	A3 NB Off-Slip Left	D	28	18	46	119	1950	707	16.8%	20.4	1.9
1/2	A3 NB Off-Slip Ahead	D	28	18	46	662	1950	707	93.7%	56.4	20.0
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	744	1950:1950	511+418	80.1 : 80.1%	14.2	7.4
2/3	A2030 Havant Road Ahead	-	-	-	-	321	1950	511	62.9%	13.8	4.2
3/2+3/1	A3 SB Off-Slip Ahead Left	A	28	67	15	1096	1950:1950	565+574	96.2 : 96.2%	52.3	22.8
3/3	A3 SB Off-Slip Ahead	A	28	67	15	364	1950	707	51.5%	25.2	6.8
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	875	1950:1950	771+819	54.0 : 56.1%	6.8	5.1
5/1	A27 Link Left	-	-	-	-	395	1950	1017	38.8%	2.9	0.3
5/2+5/3	A27 Link Left	-	-	-	-	1271	1950:1950	609+879	85.4 : 85.4%	8.5	11.0
6/1	Circulatory South Ahead	C	38	53	11	823	1950	951	86.6%	33.2	17.3
6/2	Circulatory South Right Ahead	C	38	53	11	827	1950	951	87.0%	32.8	18.5
6/3	Circulatory South Right	C	38	53	11	796	1950	951	83.7%	29.6	18.3
7/1	Circulatory West Ahead	-	-	-	-	559	1950	1950	28.7%	1.3	0.2
7/2	Circulatory West Right Ahead	-	-	-	-	1453	1950	1950	74.5%	3.6	1.5
8/1	Circulatory North Ahead	B	38	22	60	901	1950	951	94.8%	37.0	21.2
8/2	Circulatory North Right	B	38	22	60	284	1950	951	29.9%	9.6	1.9
8/3	Circulatory North Right	B	38	22	60	267	1950	951	28.1%	9.5	1.7
9/1	Circulatory East Ahead	-	-	-	-	737	1950	1950	37.8%	1.5	0.3
9/2	Circulatory East Ahead	-	-	-	-	811	1950	1950	41.6%	1.6	0.4
9/3	Circulatory East Right	-	-	-	-	364	1950	1950	18.7%	1.1	0.1
14/1	Circulatory SE Right	-	-	-	-	428	1950	1950	21.9%	1.2	0.1
14/2	Circulatory SE Right	-	-	-	-	352	1950	1950	18.1%	1.1	0.1
C1 Stream: 1	PRC for Signalled Lanes (%):		-6.9	Total Delay for Signalled Lanes (pcuHr):		29.20		Cycle Time (s): 80			
C1 Stream: 2	PRC for Signalled Lanes (%):		-4.1	Total Delay for Signalled Lanes (pcuHr):		32.70		Cycle Time (s): 80			
	PRC Over All Lanes (%):		-6.9	Total Delay Over All Lanes (pcuHr):		73.70					

Scenario 21: '2025 Base + Comm + 40 Acres + Dev (Yodel Full Dev), PM'

(FG21: '2030 Base + Comm + 40 Acres + Dev (Yodel Full Dev), PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	99	978	0	364	1441
	B	80	0	449	0	336	865
	C	1185	55	0	0	391	1631
	D	5	427	205	0	119	756
	E	335	409	316	0	0	1060
	Tot.	1605	990	1948	0	1210	5753

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	28	38
Change Point	0	35

Stage Stream: 2

Stage	1	2
Duration	28	38
Change Point	32	67

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	94.5%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	94.5%	-	-
1/1	A3 NB Off-Slip Left	D	28	39	67	119	1950	707	16.8%	20.4	1.9
1/2	A3 NB Off-Slip Ahead	D	28	39	67	637	1950	707	90.1%	47.2	17.4
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	744	1950:1950	529+433	77.3 : 77.3%	12.4	6.7
2/3	A2030 Havant Road Ahead	-	-	-	-	316	1950	529	59.8%	12.2	4.0
3/2+3/1	A3 SB Off-Slip Ahead Left	A	28	7	35	1077	1950:1950	566+573	94.5 : 94.5%	46.1	19.9
3/3	A3 SB Off-Slip Ahead	A	28	7	35	364	1950	707	51.5%	25.2	6.8
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	865	1950:1950	793+841	52.4 : 53.4%	6.4	5.0
5/1	A27 Link Left	-	-	-	-	388	1950	1019	38.1%	2.8	0.3
5/2+5/3	A27 Link Left	-	-	-	-	1243	1950:1950	590+879	84.6 : 84.6%	8.1	10.7
6/1	Circulatory South Ahead	C	38	74	32	810	1950	951	85.2%	31.1	16.1
6/2	Circulatory South Right Ahead	C	38	74	32	812	1950	951	85.4%	30.9	17.6
6/3	Circulatory South Right	C	38	74	32	789	1950	951	83.0%	29.3	18.1
7/1	Circulatory West Ahead	-	-	-	-	536	1950	1950	27.5%	1.3	0.2
7/2	Circulatory West Right Ahead	-	-	-	-	1421	1950	1950	72.9%	3.4	1.3
8/1	Circulatory North Ahead	B	38	42	0	891	1950	951	93.7%	33.8	18.1
8/2	Circulatory North Right	B	38	42	0	268	1950	951	28.2%	10.0	1.9
8/3	Circulatory North Right	B	38	42	0	253	1950	951	26.6%	9.9	1.7
9/1	Circulatory East Ahead	-	-	-	-	711	1950	1950	36.5%	1.5	0.3
9/2	Circulatory East Ahead	-	-	-	-	788	1950	1950	40.4%	1.5	0.3
9/3	Circulatory East Right	-	-	-	-	364	1950	1950	18.7%	1.1	0.1
14/1	Circulatory SE Right	-	-	-	-	422	1950	1950	21.6%	1.2	0.1
14/2	Circulatory SE Right	-	-	-	-	358	1950	1950	18.4%	1.1	0.1
C1 Stream: 1	PRC for Signalled Lanes (%):		-5.0	Total Delay for Signalled Lanes (pcuHr):		26.15		Cycle Time (s): 80			
C1 Stream: 2	PRC for Signalled Lanes (%):		-0.1	Total Delay for Signalled Lanes (pcuHr):		29.43		Cycle Time (s): 80			
	PRC Over All Lanes (%):		-5.0	Total Delay Over All Lanes (pcuHr):		66.40					

Scenario 22: '2025 Base + Comm + 40 Acres + Dev (B2), PM'

(FG22: '2025 Base + Comm + 40 Acres + Dev (B2), PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	93	919	0	346	1358
	B	75	0	422	0	318	815
	C	1128	55	0	0	373	1556
	D	5	404	185	0	114	708
	E	318	387	299	0	0	1004
	Tot.	1526	939	1825	0	1151	5441

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	24	34
Change Point	15	46

Stage Stream: 2

Stage	1	2
Duration	24	34
Change Point	43	2

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	89.2%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	89.2%	-	-
1/1	A3 NB Off-Slip Left	D	24	50	2	114	1950	677	16.8%	19.5	1.7
1/2	A3 NB Off-Slip Ahead	D	24	50	2	594	1950	677	87.7%	42.1	14.4
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	705	1950:1950	564+463	68.7 : 68.7%	8.3	4.7
2/3	A2030 Havant Road Ahead	-	-	-	-	299	1950	564	53.1%	9.1	3.0
3/2+3/1	A3 SB Off-Slip Ahead Left	A	24	22	46	1012	1950:1950	575+582	87.4 : 87.4%	32.5	12.2
3/3	A3 SB Off-Slip Ahead	A	24	22	46	346	1950	677	51.1%	24.1	6.0
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	815	1950:1950	839+886	46.8 : 47.7%	5.0	3.5
5/1	A27 Link Left	-	-	-	-	373	1950	1030	36.2%	2.7	0.3
5/2+5/3	A27 Link Left	-	-	-	-	1183	1950:1950	594+895	79.4 : 79.4%	6.0	5.5
6/1	Circulatory South Ahead	C	34	9	43	768	1950	948	81.0%	28.6	14.3
6/2	Circulatory South Right Ahead	C	34	9	43	774	1950	948	81.7%	27.7	14.9
6/3	Circulatory South Right	C	34	9	43	753	1950	948	79.4%	24.5	14.5
7/1	Circulatory West Ahead	-	-	-	-	510	1950	1950	26.2%	1.2	0.2
7/2	Circulatory West Right Ahead	-	-	-	-	1342	1950	1950	68.8%	2.9	1.1
8/1	Circulatory North Ahead	B	34	53	15	846	1950	948	89.2%	25.1	12.1
8/2	Circulatory North Right	B	34	53	15	249	1950	948	26.3%	9.9	1.8
8/3	Circulatory North Right	B	34	53	15	235	1950	948	24.8%	9.8	1.6
9/1	Circulatory East Ahead	-	-	-	-	665	1950	1950	34.1%	1.4	0.3
9/2	Circulatory East Ahead	-	-	-	-	738	1950	1950	37.8%	1.5	0.3
9/3	Circulatory East Right	-	-	-	-	346	1950	1950	17.7%	1.1	0.1
14/1	Circulatory SE Right	-	-	-	-	395	1950	1950	20.3%	1.2	0.1
14/2	Circulatory SE Right	-	-	-	-	344	1950	1950	17.6%	1.1	0.1
C1 Stream: 1	PRC for Signalled Lanes (%):		0.8		Total Delay for Signalled Lanes (pcuHr):		18.67		Cycle Time (s): 72		
C1 Stream: 2	PRC for Signalled Lanes (%):		2.6		Total Delay for Signalled Lanes (pcuHr):		24.73		Cycle Time (s): 72		
	PRC Over All Lanes (%):		0.8		Total Delay Over All Lanes (pcuHr):		51.35				

Scenario 23: '2030 Base + Comm + 40 Acres + Dev (B2), PM'

(FG23: '2030 Base + Comm + 40 Acres + Dev (B2), PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	99	971	0	364	1434
	B	80	0	446	0	336	862
	C	1191	58	0	0	392	1641
	D	5	427	195	0	119	746
	E	335	409	314	0	0	1058
	Tot.	1611	993	1926	0	1211	5741

Stage Timings**Stage Stream: 1**

Stage	1	2
Duration	24	34
Change Point	17	48

Stage Stream: 2

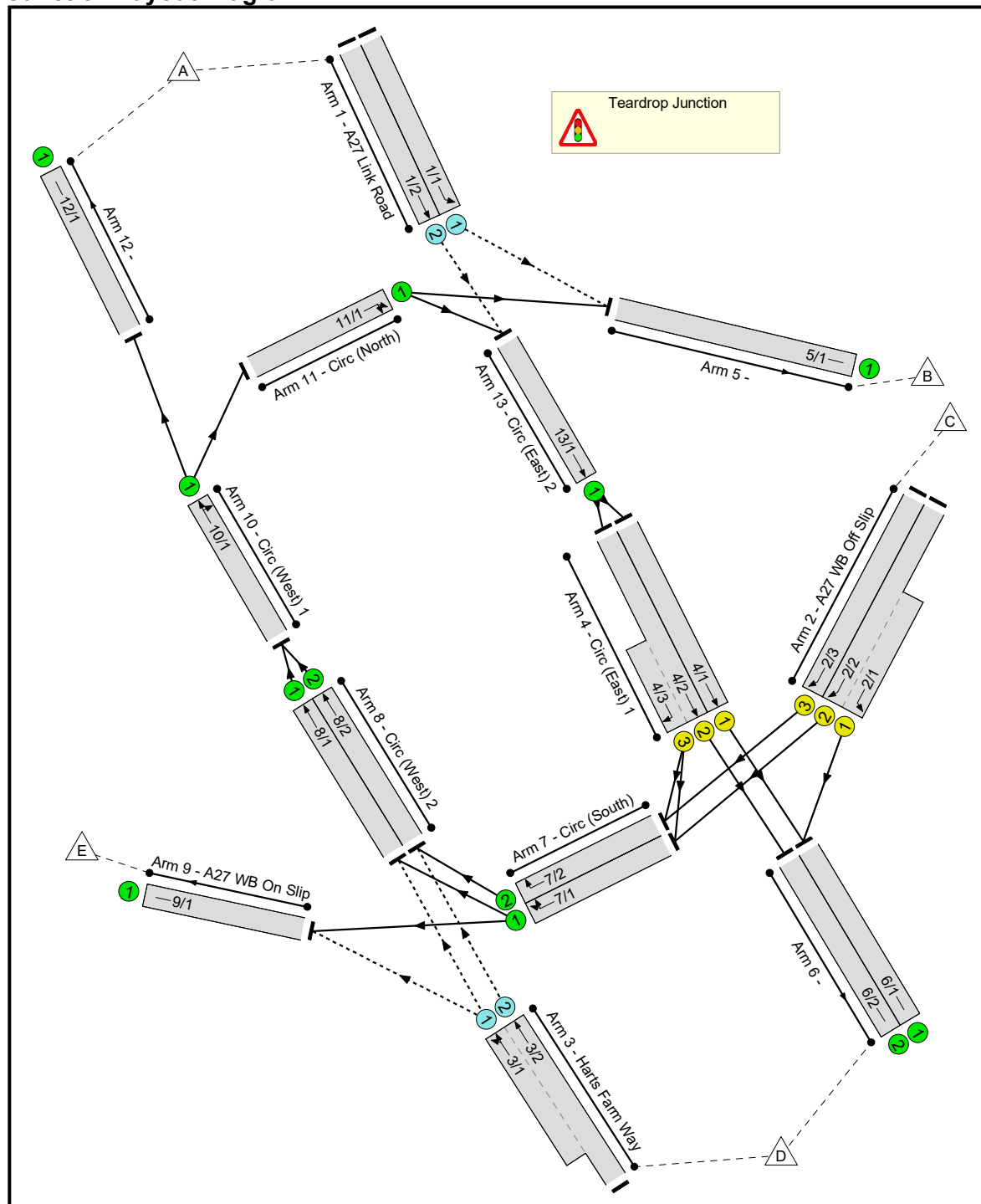
Stage	1	2
Duration	24	34
Change Point	43	2

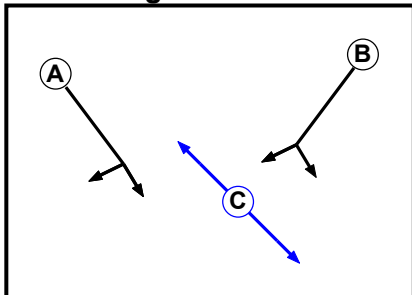
Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rusty Cutter Roundabout	-	-	-	-	-	-	-	-	94.3%	-	-
Rusty Cutter	-	-	-	-	-	-	-	-	94.3%	-	-
1/1	A3 NB Off-Slip Left	D	24	50	2	119	1950	677	17.6%	19.6	1.8
1/2	A3 NB Off-Slip Ahead	D	24	50	2	627	1950	677	92.6%	52.4	17.2
2/2+2/1	A2030 Havant Road Ahead Left	-	-	-	-	744	1950:1950	529+433	77.3 : 77.3%	11.6	6.1
2/3	A2030 Havant Road Ahead	-	-	-	-	314	1950	529	59.3%	11.3	3.5
3/2+3/1	A3 SB Off-Slip Ahead Left	A	24	24	48	1070	1950:1950	576+582	92.4 : 92.4%	39.4	15.3
3/3	A3 SB Off-Slip Ahead	A	24	24	48	364	1950	677	53.8%	24.6	6.3
4/2+4/1	Bedhampton Hill Left Ahead	-	-	-	-	862	1950:1950	808+852	51.5 : 52.4%	5.9	4.0
5/1	A27 Link Left	-	-	-	-	392	1950	1023	38.3%	2.8	0.3
5/2+5/3	A27 Link Left	-	-	-	-	1249	1950:1950	553+879	87.2 : 87.2%	10.0	11.4
6/1	Circulatory South Ahead	C	34	9	43	804	1950	948	84.8%	32.7	16.5
6/2	Circulatory South Right Ahead	C	34	9	43	816	1950	948	86.1%	31.7	17.2
6/3	Circulatory South Right	C	34	9	43	801	1950	948	84.5%	27.1	16.5
7/1	Circulatory West Ahead	-	-	-	-	533	1950	1950	27.3%	1.3	0.2
7/2	Circulatory West Right Ahead	-	-	-	-	1423	1950	1950	73.0%	3.4	1.3
8/1	Circulatory North Ahead	B	34	55	17	894	1950	948	94.3%	34.7	18.1
8/2	Circulatory North Right	B	34	55	17	262	1950	948	27.6%	9.3	1.7
8/3	Circulatory North Right	B	34	55	17	247	1950	948	26.1%	9.1	1.6
9/1	Circulatory East Ahead	-	-	-	-	701	1950	1950	35.9%	1.4	0.3
9/2	Circulatory East Ahead	-	-	-	-	779	1950	1950	39.9%	1.5	0.3
9/3	Circulatory East Right	-	-	-	-	364	1950	1950	18.7%	1.1	0.1
14/1	Circulatory SE Right	-	-	-	-	412	1950	1950	21.1%	1.2	0.1
14/2	Circulatory SE Right	-	-	-	-	368	1950	1950	18.9%	1.1	0.1
C1 Stream: 1	PRC for Signalled Lanes (%):			-4.8	Total Delay for Signalled Lanes (pcuHr):			24.09	Cycle Time (s): 72		
C1 Stream: 2	PRC for Signalled Lanes (%):			-2.9	Total Delay for Signalled Lanes (pcuHr):			30.30	Cycle Time (s): 72		
	PRC Over All Lanes (%):			-4.8	Total Delay Over All Lanes(pcuHr):			65.46			

User and Project Details

Project:	Harts Farm Way, Havant
Title:	A27 Teardrop Junction
Design Layout Ref:	Existing Junction Layout
Additional detail:	PBA Approved Model - with Vectos Revisions
File name:	Teardrop v9.5 - Approved Model (Revised).lsg3x
Author:	David Noyce
Company:	Vectos (South) Ltd
Address:	Network Building, 97 Tottenham Court Road, London W1T 4TP

Junction Layout Diagram

Phase Diagram**Phase Input Data**

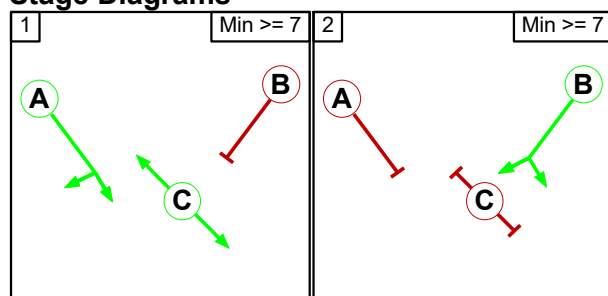
Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Pedestrian		6	6

Intergreens

Starting Phase					
Terminating Phase		A	B	C	
	A		6	-	
	B	7		6	
	C	-	6		

Stage Data

Stage No.	Phases in Stage
1	A C
2	B

Stage Diagrams**Phase Delays**

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Lane Input Data

Junction: Teardrop Junction												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (A27 Link Road)	O		2	3	52.2	Geom	-	5.00	0.00	Y	Arm 5 Left	42.71
1/2 (A27 Link Road)	O		2	3	52.2	Geom	-	5.00	0.00	Y	Arm 13 Ahead	10.00
2/1 (A27 WB Off Slip)	U	B	2	3	8.7	Geom	-	3.80	0.00	Y	Arm 6 Left	91.34
2/2 (A27 WB Off Slip)	U	B	2	3	60.0	Geom	-	3.80	0.00	N	Arm 7 Ahead	17.00
2/3 (A27 WB Off Slip)	U	B	2	3	60.0	Geom	-	3.80	0.00	N	Arm 7 Ahead	17.00
3/1 (Harts Farm Way)	O		2	3	12.2	Inf	-	-	-	-	-	-
3/2 (Harts Farm Way)	O		2	3	60.0	Inf	-	-	-	-	-	-
4/1 (Circ (East) 1)	U	A	2	3	6.1	Geom	-	3.25	0.00	Y	Arm 6 Ahead	Inf
4/2 (Circ (East) 1)	U	A	2	3	60.0	Geom	-	3.25	0.00	N	Arm 6 Ahead	Inf
4/3 (Circ (East) 1)	U	A	2	3	6.1	Geom	-	3.25	0.00	N	Arm 7 Right	17.00

Give-Way Lane Input Data

Junction: Teardrop Junction											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RT F	Right Turn Movement (s)	Max Turns in Intergreen (PCU)
1/1 (A27 Link Road)	5/1 (Left)	2532	0	11/1	0.82	To 5/1 (Ahead)	-	-	-	-	-
1/2 (A27 Link Road)	13/1 (Ahead)	2532	0	11/1	0.82	All	-	-	-	-	-
3/1 (Harts Farm Way)	8/1 (Ahead)	1211	0	7/1	0.38	All	-	-	-	-	-
	9/1 (Left)	1211	0	7/1	0.38	All					
3/2 (Harts Farm Way)	8/2 (Ahead)	1211	0	7/1	0.38	All	-	-	-	-	-
				7/2	0.38	All					

Lane Connector Input Data

Junction: Teardrop Junction				
Org Lane	Dest Lane	Junction	Mean Cruise Time	Platoon Dispersion
1/1	5/1	Internal	5	35
1/2	13/1	Internal	12	35
2/1	6/1	Internal	5	35
2/2	7/1	Internal	8	N/A
2/3	7/2	Internal	8	N/A
3/1	8/1	Internal	12	35
3/1	9/1	Internal	5	35
3/2	8/2	Internal	12	35
4/1	6/1	Internal	5	35
4/2	6/2	Internal	5	35
4/3	7/1	Internal	8	N/A
4/3	7/2	Internal	7	N/A
7/1	8/1	Internal	11	35
7/1	9/1	Internal	5	35
7/2	8/2	Internal	10	35
8/1	10/1	Internal	13	35
8/2	10/1	Internal	13	35
10/1	11/1	Internal	2	35
10/1	12/1	Internal	5	35
11/1	5/1	Internal	5	35
11/1	13/1	Internal	11	35
13/1	4/1	Internal	5	35
13/1	4/2	Internal	5	35

Scenario 1: '2016 Base, AM'

(FG1: '2016 Base, AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	7	868	0	1032	291	2198
	B	0	0	0	0	0	0
	C	868	5	0	66	46	985
	D	165	15	0	0	137	317
	E	0	0	0	0	0	0
	Tot.	1040	888	0	1098	474	3500

Stage Timings

Stage	1	2
Duration	18	20
Change Point	0	25

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	82.7%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	82.7%	-	-
1/1	A27 Link Road Left	-	-	-	-	868	2043	2043	42.5%	1.5	0.4
1/2	A27 Link Road Ahead	-	-	-	-	1330	1839	1839	72.3%	3.5	1.3
2/2+2/1	A27 WB Off Slip Left Ahead	B	20	31	0	317	1962:1963	777+204	32.3 : 32.3%	12.6	2.6
2/3	A27 WB Off Slip Ahead	B	20	31	0	668	1962	808	82.7%	25.8	10.7
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	317	Inf : Inf	770+1005	17.9 : 17.8%	1.4	0.4
4/1	Circ (East) 1 Ahead	A	18	7	25	509	1940	723	70.4%	21.9	7.3
4/2+4/3	Circ (East) 1 Ahead Right	A	18	7	25	821	2080:1911	656+374	79.8 : 79.8%	21.4	8.3
C1			PRC for Signalled Lanes (%):		8.8	Total Delay for Signalled Lanes (pcuHr):		13.88	Cycle Time (s): 51		
			PRC Over All Lanes (%):		8.8	Total Delay Over All Lanes(pcuHr):		15.67			

(FG2: '2016 Base, PM', Plan 1: 'Network Control Plan 1')

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	2	941	0	328	296	1567
	B	0	0	0	0	0	0
	C	813	3	0	46	8	870
	D	501	22	0	0	597	1120
	E	0	0	0	0	0	0
	Tot.	1316	966	0	374	901	3557

Stage	1	2
Duration	9	21
Change Point	0	16

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	70.5%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	70.5%	-	-
1/1	A27 Link Road Left	-	-	-	-	941	2043	2043	46.1%	1.6	0.4
1/2	A27 Link Road Ahead	-	-	-	-	626	1839	1839	34.0%	1.5	0.3
2/2+2/1	A27 WB Off Slip Left Ahead	B	21	22	0	162	1962:1963	937+371	12.4 : 12.4%	7.0	0.8
2/3	A27 WB Off Slip Ahead	B	21	22	0	708	1962	1004	70.5%	14.1	7.5
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	1120	Inf : Inf	791+1054	60.7 : 60.7%	2.8	2.6
4/1	Circ (East) 1 Ahead	A	9	7	16	230	1940	451	51.0%	22.5	2.9
4/2+4/3	Circ (East) 1 Ahead Right	A	9	7	16	396	2080:1911	146+444	67.1 : 67.1%	23.8	4.2
C1	PRC for Signalled Lanes (%): 27.6 PRC Over All Lanes (%): 27.6			Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):				7.13 8.67	Cycle Time (s): 43		

(FG4: '2025 Base + Comm + 40 Acres, AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	8	1022	0	1183	378	2591
	B	0	0	0	0	0	0
	C	1011	0	0	76	53	1140
	D	178	29	0	0	157	364
	E	0	0	0	0	0	0
	Tot.	1197	1051	0	1259	588	4095

Stage	1	2
Duration	21	17
Change Point	0	28

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	85.3%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	85.3%	-	-
1/1	A27 Link Road Left	-	-	-	-	1022	2043	2043	50.0%	1.8	0.5
1/2	A27 Link Road Ahead	-	-	-	-	1569	1839	1839	85.3%	6.5	2.8
2/2+2/1	A27 WB Off Slip Left Ahead	B	17	34	0	610	1962:1963	692+99	77.1 : 77.1%	24.0	8.3
2/3	A27 WB Off Slip Ahead	B	17	34	0	530	1962	692	76.5%	25.5	8.2
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	364	Inf : Inf	726+864	22.9 : 22.9%	2.3	0.8
4/1	Circ (East) 1 Ahead	A	21	7	28	601	1940	837	71.8%	19.5	8.3
4/2+4/3	Circ (East) 1 Ahead Right	A	21	7	28	968	2080:1911	713+473	81.6 : 81.6%	19.1	9.1
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):			10.3 5.5	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):			16.21 19.79	Cycle Time (s): 51		

(FG5: '2025 Base + Comm + 40 Acres, PM', Plan 1: 'Network Control Plan 1')

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	2	1091	0	374	360	1827
	B	0	0	0	0	0	0
	C	956	0	0	52	9	1017
	D	564	32	0	0	680	1276
	E	0	0	0	0	0	0
	Tot.	1522	1123	0	426	1049	4120

Stage	1	2
Duration	16	14
Change Point	0	23

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	77.1%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	77.1%	-	-
1/1	A27 Link Road Left	-	-	-	-	1091	2043	2043	53.4%	1.9	0.6
1/2	A27 Link Road Ahead	-	-	-	-	736	1839	1839	40.0%	1.6	0.3
2/2+2/1	A27 WB Off Slip Left Ahead	B	14	29	0	533	1962:1963	684+74	70.3 : 70.3%	19.7	6.1
2/3	A27 WB Off Slip Ahead	B	14	29	0	484	1962	684	70.7%	21.0	6.2
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	1276	Inf : Inf	765+891	77.1 : 77.0%	6.3	6.3
4/1	Circ (East) 1 Ahead	A	16	7	23	224	1940	767	29.2%	12.2	2.0
4/2+4/3	Circ (East) 1 Ahead Right	A	16	7	23	512	2080:1911	291+701	51.6 : 51.6%	13.1	3.7
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):			27.3 16.7	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):			8.36 11.51	Cycle Time (s): 43		

Scenario 6: '2025 Base + Comm + 40 Acres + Dev (Amazon), AM'

(FG6: '2025 Base + Comm + 40 Acres + Dev (Amazon), AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	8	1022	0	1242	378	2650
	B	0	0	0	0	0	0
	C	1011	0	0	86	53	1150
	D	223	42	0	0	191	456
	E	0	0	0	0	0	0
	Tot.	1242	1064	0	1328	622	4256

Stage Timings

Stage	1	2
Duration	21	17
Change Point	0	28

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	88.5%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	88.5%	-	-
1/1	A27 Link Road Left	-	-	-	-	1022	2043	2043	50.0%	1.8	0.5
1/2	A27 Link Road Ahead	-	-	-	-	1628	1839	1839	88.5%	8.2	3.7
2/2+2/1	A27 WB Off Slip Left Ahead	B	17	34	0	622	1962:1963	691+111	77.5 : 77.5%	24.0	8.4
2/3	A27 WB Off Slip Ahead	B	17	34	0	528	1962	692	76.2%	25.3	8.2
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	456	Inf : Inf	432+863	35.2 : 35.2%	2.8	0.9
4/1	Circ (East) 1 Ahead	A	21	7	28	635	1940	837	75.9%	21.0	9.1
4/2+4/3	Circ (East) 1 Ahead Right	A	21	7	28	993	2080:1911	718+457	84.5 : 84.5%	20.8	10.4
C1			PRC for Signalled Lanes (%):		6.5	Total Delay for Signalled Lanes (pcuHr):		17.32	Cycle Time (s): 51		
			PRC Over All Lanes (%):		1.7	Total Delay Over All Lanes(pcuHr):		21.89			

Scenario 8: '2025 Base + Comm + 40 Acres + Dev (TNT), AM'

(FG8: '2025 Base + Comm + 40 Acres + Dev (TNT), AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	8	1022	0	1223	378	2631
	B	0	0	0	0	0	0
	C	1011	0	0	83	53	1147
	D	192	33	0	0	168	393
	E	0	0	0	0	0	0
	Tot.	1211	1055	0	1306	599	4171

Stage Timings

Stage	1	2
Duration	21	17
Change Point	0	28

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	87.5%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	87.5%	-	-
1/1	A27 Link Road Left	-	-	-	-	1022	2043	2043	50.0%	1.8	0.5
1/2	A27 Link Road Ahead	-	-	-	-	1609	1839	1839	87.5%	7.6	3.4
2/2+2/1	A27 WB Off Slip Left Ahead	B	17	34	0	619	1962:1963	692+107	77.5 : 77.5%	24.0	8.4
2/3	A27 WB Off Slip Ahead	B	17	34	0	528	1962	692	76.2%	25.3	8.2
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	393	Inf : Inf	726+863	24.8 : 24.7%	2.4	0.9
4/1	Circ (East) 1 Ahead	A	21	7	28	623	1940	837	74.4%	20.5	8.7
4/2+4/3	Circ (East) 1 Ahead Right	A	21	7	28	986	2080:1911	717+461	83.7 : 83.7%	20.3	10.0
C1			PRC for Signalled Lanes (%):		7.5	Total Delay for Signalled Lanes (pcuHr):		16.95	Cycle Time (s): 51		
			PRC Over All Lanes (%):		2.9	Total Delay Over All Lanes(pcuHr):		21.11			

(FG9: '2025 Base + Comm + 40 Acres + Dev (TNT), PM', Plan 1: 'Network Control Plan 1')

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	2	1091	0	415	360	1868
	B	0	0	0	0	0	0
	C	956	0	0	60	9	1025
	D	579	36	0	0	691	1306
	E	0	0	0	0	0	0
	Tot.	1537	1127	0	475	1060	4199

Stage	1	2
Duration	16	14
Change Point	0	23

[illegible]

(FG10: '2025 Base + Comm + 40 Acres + Dev (B8), AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	8	1022	0	1238	378	2646
	B	0	0	0	0	0	0
	C	1011	0	0	85	53	1149
	D	190	33	0	0	166	389
	E	0	0	0	0	0	0
	Tot.	1209	1055	0	1323	597	4184

Stage	1	2
Duration	21	17
Change Point	0	28

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	88.3%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	88.3%	-	-
1/1	A27 Link Road Left	-	-	-	-	1022	2043	2043	50.0%	1.8	0.5
1/2	A27 Link Road Ahead	-	-	-	-	1624	1839	1839	88.3%	8.1	3.7
2/2+2/1	A27 WB Off Slip Left Ahead	B	17	34	0	621	1962:1963	692+110	77.5 : 77.5%	24.0	8.4
2/3	A27 WB Off Slip Ahead	B	17	34	0	528	1962	692	76.2%	25.3	8.2
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	389	Inf : Inf	726+863	24.5 : 24.4%	2.4	0.9
4/1	Circ (East) 1 Ahead	A	21	7	28	632	1940	837	75.5%	20.9	9.1
4/2+4/3	Circ (East) 1 Ahead Right	A	21	7	28	992	2080:1911	718+457	84.4 : 84.4%	20.7	10.4
C1	PRC for Signalled Lanes (%): 6.7 PRC Over All Lanes (%): 1.9			Total Delay for Signalled Lanes (pcuHr): 17.24 Total Delay Over All Lanes(pcuHr): 21.65				Cycle Time (s): 51			

(FG11: '2025 Base + Comm + 40 Acres + Dev (B8), PM', Plan 1: 'Network Control Plan 1')

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	2	1091	0	401	360	1854
	B	0	0	0	0	0	0
	C	956	0	0	57	9	1022
	D	585	38	0	0	696	1319
	E	0	0	0	0	0	0
	Tot.	1543	1129	0	458	1065	4195

Stage	1	2
Duration	16	14
Change Point	0	23

[illegible]

(FG12: '2025 Base + Comm + 40 Acres + Dev (Yodel), AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	8	1022	0	1250	378	2658
	B	0	0	0	0	0	0
	C	1011	0	0	87	53	1151
	D	215	40	0	0	185	440
	E	0	0	0	0	0	0
	Tot.	1234	1062	0	1337	616	4249

Stage	1	2
Duration	21	17
Change Point	0	28

[illegible]

(FG13: '2025 Base + Comm + 40 Acres + Dev (Yodel), PM', Plan 1: 'Network Control Plan 1')

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	2	1091	0	396	360	1849
	B	0	0	0	0	0	0
	C	956	0	0	56	9	1021
	D	592	40	0	0	701	1333
	E	0	0	0	0	0	0
	Tot.	1550	1131	0	452	1070	4203

Stage	1	2
Duration	16	14
Change Point	0	23

[illegible]

Scenario 14: '2025 Base + Comm + 40 Acres + Dev (Amazon wPoyle&Norwich), AM'

(FG14: '2025 Base + Comm + 40 Acres + Dev (Amazon wPoyle&Norwich), AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	8	1022	0	1352	378	2760
	B	0	0	0	0	0	0
	C	1011	0	0	105	53	1169
	D	239	47	0	0	202	488
	E	0	0	0	0	0	0
	Tot.	1258	1069	0	1457	633	4417

Stage Timings

Stage	1	2
Duration	22	16
Change Point	0	29

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	94.5%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	94.5%	-	-
1/1	A27 Link Road Left	-	-	-	-	1022	2043	2043	50.0%	1.8	0.5
1/2	A27 Link Road Ahead	-	-	-	-	1738	1839	1839	94.5%	15.5	7.5
2/2+2/1	A27 WB Off Slip Left Ahead	B	16	35	0	643	1962:1963	654+128	82.3 : 82.3%	27.6	9.1
2/3	A27 WB Off Slip Ahead	B	16	35	0	526	1962	654	80.4%	29.1	8.7
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	488	Inf : Inf	726+863	30.7 : 30.7%	2.7	1.3
4/1	Circ (East) 1 Ahead	A	22	7	29	701	1940	875	80.1%	22.2	10.3
4/2+4/3	Circ (East) 1 Ahead Right	A	22	7	29	1037	2080:1911	751+445	86.7 : 86.7%	21.6	11.8
C1			PRC for Signalled Lanes (%):		3.9	Total Delay for Signalled Lanes (pcuHr):		19.73	Cycle Time (s): 51		
			PRC Over All Lanes (%):		-5.0	Total Delay Over All Lanes(pcuHr):		28.09			

Scenario 16: '2025 Base + Comm + 40 Acres + Dev (Amazon wPoyle&Norwich 3 Unit Test), AM'

(FG16: '2025 Base + Comm + 40 Acres + Dev (Amazon wPoyle&Norwich 3 Unit Test), AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	8	1022	0	1315	378	2723
	B	0	0	0	0	0	0
	C	1011	0	0	99	53	1163
	D	218	41	0	0	187	446
	E	0	0	0	0	0	0
	Tot.	1237	1063	0	1414	618	4332

Stage Timings

Stage	1	2
Duration	22	16
Change Point	0	29

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	92.5%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	92.5%	-	-
1/1	A27 Link Road Left	-	-	-	-	1022	2043	2043	50.0%	1.8	0.5
1/2	A27 Link Road Ahead	-	-	-	-	1701	1839	1839	92.5%	12.0	5.7
2/2+2/1	A27 WB Off Slip Left Ahead	B	16	35	0	636	1962:1963	654+121	82.1 : 82.1%	27.6	9.1
2/3	A27 WB Off Slip Ahead	B	16	35	0	527	1962	654	80.6%	29.2	8.7
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	446	Inf : Inf	726+863	28.1 : 28.0%	2.6	1.2
4/1	Circ (East) 1 Ahead	A	22	7	29	678	1940	875	77.5%	20.8	9.8
4/2+4/3	Circ (East) 1 Ahead Right	A	22	7	29	1023	2080:1911	749+454	85.1 : 85.1%	20.4	10.9
C1	PRC for Signalled Lanes (%): 5.8			Total Delay for Signalled Lanes (pcuHr): 18.88			Cycle Time (s): 51				
	PRC Over All Lanes (%): -2.8			Total Delay Over All Lanes(pcuHr): 25.39							

Scenario 18: '2025 Base + Comm + 40 Acres + Dev (Amazon Full Dev), AM'

(FG18: '2025 Base + Comm + 40 Acres + Dev (Amazon Full Dev), AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	8	1022	0	1230	378	2638
	B	0	0	0	0	0	0
	C	1011	0	0	84	53	1148
	D	247	50	0	0	209	506
	E	0	0	0	0	0	0
	Tot.	1266	1072	0	1314	640	4292

Stage Timings

Stage	1	2
Duration	21	17
Change Point	0	28

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	87.9%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	87.9%	-	-
1/1	A27 Link Road Left	-	-	-	-	1022	2043	2043	50.0%	1.8	0.5
1/2	A27 Link Road Ahead	-	-	-	-	1616	1839	1839	87.9%	7.8	3.5
2/2+2/1	A27 WB Off Slip Left Ahead	B	17	34	0	619	1962:1963	692+109	77.4 : 77.4%	24.0	8.4
2/3	A27 WB Off Slip Ahead	B	17	34	0	529	1962	692	76.4%	25.4	8.2
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	506	Inf : Inf	726+864	31.8 : 31.8%	2.6	1.3
4/1	Circ (East) 1 Ahead	A	21	7	28	630	1940	837	75.3%	20.8	8.9
4/2+4/3	Circ (East) 1 Ahead Right	A	21	7	28	986	2080:1911	717+461	83.7 : 83.7%	20.3	10.0
C1 PRC for Signalled Lanes (%): 7.5 Total Delay for Signalled Lanes (pcuHr): 17.05 Cycle Time (s): 51 PRC Over All Lanes (%): 2.4 Total Delay Over All Lanes(pcuHr): 21.43											

Scenario 19: '2025 Base + Comm + 40 Acres + Dev (Amazon Full Dev), PM'

(FG19: '2025 Base + Comm + 40 Acres + Dev (Amazon Full Dev), PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	2	1091	0	464	360	1917
	B	0	0	0	0	0	0
	C	956	0	0	68	9	1033
	D	625	50	0	0	726	1401
	E	0	0	0	0	0	0
	Tot.	1583	1141	0	532	1095	4351

Stage Timings

Stage	1	2
Duration	15	15
Change Point	0	22

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	84.8%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	84.8%	-	-
1/1	A27 Link Road Left	-	-	-	-	1091	2043	2043	53.4%	1.9	0.6
1/2	A27 Link Road Ahead	-	-	-	-	826	1839	1839	44.9%	1.8	0.4
2/2+2/1	A27 WB Off Slip Left Ahead	B	15	28	0	546	1962:1963	730+104	65.5 : 65.5%	17.1	5.6
2/3	A27 WB Off Slip Ahead	B	15	28	0	487	1962	730	66.7%	18.6	5.7
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	1401	Inf : Inf	760+892	84.7 : 84.8%	9.1	8.5
4/1	Circ (East) 1 Ahead	A	15	7	22	238	1940	722	33.0%	13.4	2.2
4/2+4/3	Circ (East) 1 Ahead Right	A	15	7	22	588	2080:1911	406+650	55.7 : 55.7%	13.9	3.9
C1	PRC for Signalled Lanes (%): 34.9		PRC Over All Lanes (%): 6.1		Total Delay for Signalled Lanes (pcuHr): 8.28		Total Delay Over All Lanes(pcuHr): 12.79		Cycle Time (s): 43		

Scenario 20: '2025 Base + Comm + 40 Acres + Dev (Yodel Full Dev), AM'

(FG20: '2025 Base + Comm + 40 Acres + Dev (Yodel Full Dev), AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	8	1022	0	1242	378	2650
	B	0	0	0	0	0	0
	C	1011	0	0	86	53	1150
	D	234	46	0	0	199	479
	E	0	0	0	0	0	0
	Tot.	1253	1068	0	1328	630	4279

Stage Timings

Stage	1	2
Duration	21	17
Change Point	0	28

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	88.5%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	88.5%	-	-
1/1	A27 Link Road Left	-	-	-	-	1022	2043	2043	50.0%	1.8	0.5
1/2	A27 Link Road Ahead	-	-	-	-	1628	1839	1839	88.5%	8.2	3.7
2/2+2/1	A27 WB Off Slip Left Ahead	B	17	34	0	622	1962:1963	691+111	77.5 : 77.5%	24.0	8.4
2/3	A27 WB Off Slip Ahead	B	17	34	0	528	1962	692	76.2%	25.3	8.2
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	479	Inf : Inf	726+863	30.2 : 30.1%	2.6	1.2
4/1	Circ (East) 1 Ahead	A	21	7	28	635	1940	837	75.9%	21.0	9.1
4/2+4/3	Circ (East) 1 Ahead Right	A	21	7	28	993	2080:1911	718+457	84.5 : 84.5%	20.8	10.4
C1 PRC for Signalled Lanes (%): 6.5 Total Delay for Signalled Lanes (pcuHr): 17.32 Cycle Time (s): 51											
PRC Over All Lanes (%): 1.7											

Scenario 21: '2025 Base + Comm + 40 Acres + Dev (Yodel Full Dev), PM'

(FG21: '2025 Base + Comm + 40 Acres + Dev (Yodel Full Dev), PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	2	1091	0	405	360	1858
	B	0	0	0	0	0	0
	C	956	0	0	58	9	1023
	D	589	40	0	0	699	1328
	E	0	0	0	0	0	0
	Tot.	1547	1131	0	463	1068	4209

Stage Timings

Stage	1	2
Duration	15	15
Change Point	0	22

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	80.4%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	80.4%	-	-
1/1	A27 Link Road Left	-	-	-	-	1091	2043	2043	53.4%	1.9	0.6
1/2	A27 Link Road Ahead	-	-	-	-	767	1839	1839	41.7%	1.7	0.4
2/2+2/1	A27 WB Off Slip Left Ahead	B	15	28	0	534	1962:1963	730+89	65.2 : 65.2%	17.2	5.6
2/3	A27 WB Off Slip Ahead	B	15	28	0	489	1962	730	67.0%	18.7	5.8
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	1328	Inf : Inf	760+893	80.3 : 80.4%	7.2	7.1
4/1	Circ (East) 1 Ahead	A	15	7	22	236	1940	722	32.7%	13.4	2.2
4/2+4/3	Circ (East) 1 Ahead Right	A	15	7	22	531	2080:1911	310+664	54.5 : 54.5%	14.1	3.9
C1 PRC for Signalled Lanes (%): 34.4 Total Delay for Signalled Lanes (pcuHr): 8.05 Cycle Time (s): 43											
PRC Over All Lanes (%): 11.9 Total Delay Over All Lanes(pcuHr): 11.65											

Scenario 22: '2025 Base + Comm + 40 Acres + Dev (B2), AM'

(FG22: '2025 Base + Comm + 40 Acres + Dev (B2), AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	8	1022	0	1273	378	2681
	B	0	0	0	0	0	0
	C	1011	0	0	91	53	1155
	D	189	32	0	0	166	387
	E	0	0	0	0	0	0
	Tot.	1208	1054	0	1364	597	4223

Stage Timings

Stage	1	2
Duration	22	16
Change Point	0	29

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	90.2%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	90.2%	-	-
1/1	A27 Link Road Left	-	-	-	-	1022	2043	2043	50.0%	1.8	0.5
1/2	A27 Link Road Ahead	-	-	-	-	1659	1839	1839	90.2%	9.5	4.4
2/2+2/1	A27 WB Off Slip Left Ahead	B	16	35	0	628	1962:1963	654+111	82.1 : 82.1%	27.8	9.1
2/3	A27 WB Off Slip Ahead	B	16	35	0	527	1962	654	80.6%	29.2	8.7
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	387	Inf : Inf	726+863	24.3 : 24.5%	2.4	0.9
4/1	Circ (East) 1 Ahead	A	22	7	29	653	1940	875	74.6%	19.6	9.1
4/2+4/3	Circ (East) 1 Ahead Right	A	22	7	29	1006	2080:1911	745+464	83.2 : 83.2%	19.2	9.9
C1 PRC for Signalled Lanes (%): 8.2 Total Delay for Signalled Lanes (pcuHr): 18.04 Cycle Time (s): 51 											

(FG23: '2025 Base + Comm + 40 Acres + Dev (B2), PM', Plan 1: 'Network Control Plan 1')

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	2	1091	0	382	360	1835
	B	0	0	0	0	0	0
	C	956	0	0	54	9	1019
	D	599	43	0	0	707	1349
	E	0	0	0	0	0	0
	Tot.	1557	1134	0	436	1076	4203

Stage	1	2
Duration	13	17
Change Point	0	20

[illegible]

Scenario 25: '2030 Base + Comm + 40 Acres, AM'

(FG25: '2030 Base + Comm + 40 Acres, AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	8	1078	0	1250	397	2733
	B	0	0	0	0	0	0
	C	1068	0	0	80	56	1204
	D	188	30	0	0	165	383
	E	0	0	0	0	0	0
	Tot.	1264	1108	0	1330	618	4320

Stage Timings

Stage	1	2
Duration	21	17
Change Point	0	28

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	90.0%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	90.0%	-	-
1/1	A27 Link Road Left	-	-	-	-	1078	2043	2043	52.8%	1.9	0.6
1/2	A27 Link Road Ahead	-	-	-	-	1655	1839	1839	90.0%	9.3	4.3
2/2+2/1	A27 WB Off Slip Left Ahead	B	17	34	0	645	1962:1963	692+98	81.6 : 81.6%	26.5	9.4
2/3	A27 WB Off Slip Ahead	B	17	34	0	559	1962	692	80.7%	28.0	9.2
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	383	Inf : Inf	701+845	24.8 : 24.7%	2.6	1.0
4/1	Circ (East) 1 Ahead	A	21	7	28	644	1940	837	77.0%	21.5	9.3
4/2+4/3	Circ (East) 1 Ahead Right	A	21	7	28	1011	2080:1911	712+476	85.1 : 85.1%	21.1	10.5
C1			PRC for Signalled Lanes (%):		5.8	Total Delay for Signalled Lanes (pcuHr):		18.87	Cycle Time (s): 51		
			PRC Over All Lanes (%):		0.0	Total Delay Over All Lanes(pcuHr):		24.00			

(FG26: '2030 Base + Comm + 40 Acres, PM', Plan 1: 'Network Control Plan 1')

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	2	1152	0	395	380	1929
	B	0	0	0	0	0	0
	C	1009	0	0	55	10	1074
	D	596	34	0	0	719	1349
	E	0	0	0	0	0	0
	Tot.	1607	1186	0	450	1109	4352

Stage	1	2
Duration	17	13
Change Point	0	24

[illegible]

Scenario 27: '2030 Base + Comm + 40 Acres + Dev (Amazon), AM'

(FG27: '2030 Base + Comm + 40 Acres + Dev (Amazon), AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	8	1078	0	1310	397	2793
	B	0	0	0	0	0	0
	C	1068	0	0	90	56	1214
	D	233	44	0	0	200	477
	E	0	0	0	0	0	0
	Tot.	1309	1122	0	1400	653	4484

Stage Timings

Stage	1	2
Duration	21	17
Change Point	0	28

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	93.3%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	93.3%	-	-
1/1	A27 Link Road Left	-	-	-	-	1078	2043	2043	52.8%	1.9	0.6
1/2	A27 Link Road Ahead	-	-	-	-	1715	1839	1839	93.3%	13.2	6.3
2/2+2/1	A27 WB Off Slip Left Ahead	B	17	34	0	656	1962:1963	692+110	81.8 : 81.8%	26.5	9.4
2/3	A27 WB Off Slip Ahead	B	17	34	0	558	1962	692	80.6%	27.9	9.1
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	477	Inf : Inf	701+845	30.9 : 30.8%	2.8	1.3
4/1	Circ (East) 1 Ahead	A	21	7	28	678	1940	837	81.0%	23.7	10.4
4/2+4/3	Circ (East) 1 Ahead Right	A	21	7	28	1037	2080:1911	717+460	88.1 : 88.1%	23.7	12.2
C1			PRC for Signalled Lanes (%):		2.2	Total Delay for Signalled Lanes (pcuHr):		20.46	Cycle Time (s): 51		
			PRC Over All Lanes (%):		-3.6	Total Delay Over All Lanes(pcuHr):		27.66			

Scenario 29: '2030 Base + Comm + 40 Acres + Dev (TNT), AM'

(FG29: '2030 Base + Comm + 40 Acres + Dev (TNT), AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	8	1078	0	1290	397	2773
	B	0	0	0	0	0	0
	C	1068	0	0	87	56	1211
	D	202	35	0	0	176	413
	E	0	0	0	0	0	0
	Tot.	1278	1113	0	1377	629	4397

Stage Timings

Stage	1	2
Duration	21	17
Change Point	0	28

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	92.2%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	92.2%	-	-
1/1	A27 Link Road Left	-	-	-	-	1078	2043	2043	52.8%	1.9	0.6
1/2	A27 Link Road Ahead	-	-	-	-	1695	1839	1839	92.2%	11.6	5.5
2/2+2/1	A27 WB Off Slip Left Ahead	B	17	34	0	652	1962:1963	692+107	81.7 : 81.7%	26.4	9.4
2/3	A27 WB Off Slip Ahead	B	17	34	0	559	1962	692	80.7%	28.0	9.2
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	413	Inf : Inf	701+845	26.7 : 26.7%	2.6	1.1
4/1	Circ (East) 1 Ahead	A	21	7	28	668	1940	837	79.8%	23.0	10.1
4/2+4/3	Circ (East) 1 Ahead Right	A	21	7	28	1027	2080:1911	716+466	86.9 : 86.9%	22.6	11.3
C1 PRC for Signalled Lanes (%): 3.5 Total Delay for Signalled Lanes (pcuHr): 19.85 Cycle Time (s): 51 PRC Over All Lanes (%): -2.4 Total Delay Over All Lanes(pcuHr): 26.18											

(FG30: '2030 Base + Comm + 40 Acres + Dev (TNT), PM', Plan 1: 'Network Control Plan 1')

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	2	1152	0	436	380	1970
	B	0	0	0	0	0	0
	C	1009	0	0	63	10	1082
	D	611	38	0	0	730	1379
	E	0	0	0	0	0	0
	Tot.	1622	1190	0	499	1120	4431

Stage	1	2
Duration	14	16
Change Point	0	21

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	85.6%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	85.6%	-	-
1/1	A27 Link Road Left	-	-	-	-	1152	2043	2043	56.4%	2.0	0.6
1/2	A27 Link Road Ahead	-	-	-	-	818	1839	1839	44.5%	1.8	0.4
2/2+2/1	A27 WB Off Slip Left Ahead	B	16	27	0	568	1962:1963	776+97	65.1 : 65.1%	16.2	5.8
2/3	A27 WB Off Slip Ahead	B	16	27	0	514	1962	776	66.3%	17.5	6.0
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	1379	Inf : Inf	737+874	85.6 : 85.5%	9.7	8.9
4/1	Circ (East) 1 Ahead	A	14	7	21	261	1940	677	38.6%	14.9	2.6
4/2+4/3	Circ (East) 1 Ahead Right	A	14	7	21	557	2080:1911	290+634	60.3 : 60.3%	15.8	4.4
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):			35.8 5.1	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):			8.58 13.35	Cycle Time (s): 43		

(FG31: '2030 Base + Comm + 40 Acres + Dev (B8), AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	8	1078	0	1306	397	2789
	B	0	0	0	0	0	0
	C	1068	0	0	90	56	1214
	D	201	34	0	0	175	410
	E	0	0	0	0	0	0
	Tot.	1277	1112	0	1396	628	4413

Stage	1	2
Duration	21	17
Change Point	0	28

[illegible]

(FG32: '2030 Base + Comm + 40 Acres + Dev (B8), PM', Plan 1: 'Network Control Plan 1')

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	2	1152	0	423	380	1957
	B	0	0	0	0	0	0
	C	1009	0	0	60	10	1079
	D	617	40	0	0	735	1392
	E	0	0	0	0	0	0
	Tot.	1628	1192	0	483	1125	4428

Stage	1	2
Duration	14	16
Change Point	0	21

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	86.4%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	86.4%	-	-
1/1	A27 Link Road Left	-	-	-	-	1152	2043	2043	56.4%	2.0	0.6
1/2	A27 Link Road Ahead	-	-	-	-	805	1839	1839	43.8%	1.7	0.4
2/2+2/1	A27 WB Off Slip Left Ahead	B	16	27	0	565	1962:1963	776+92	65.1 : 65.1%	16.2	5.8
2/3	A27 WB Off Slip Ahead	B	16	27	0	514	1962	776	66.3%	17.5	6.0
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	1392	Inf : Inf	737+874	86.4 : 86.3%	10.2	9.1
4/1	Circ (East) 1 Ahead	A	14	7	21	261	1940	677	38.6%	14.9	2.6
4/2+4/3	Circ (East) 1 Ahead Right	A	14	7	21	544	2080:1911	270+636	60.0 : 60.0%	15.9	4.4
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):			35.8 4.1	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):			8.53 13.51	Cycle Time (s): 43		

(FG33: '2030 Base + Comm + 40 Acres + Dev (Yodel), AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	8	1078	0	1317	397	2800
	B	0	0	0	0	0	0
	C	1068	0	0	92	56	1216
	D	226	42	0	0	194	462
	E	0	0	0	0	0	0
	Tot.	1302	1120	0	1409	647	4478

Stage	1	2
Duration	21	17
Change Point	0	28

[illegible]

Scenario 39: '2000 Base + Comm + 40 Acres + Dev (Amazon Full Dev), AM'

(FG39: '2030 Base + Comm + 40 Acres + Dev (Amazon Full Dev), AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	8	1078	0	1297	397	2780
	B	0	0	0	0	0	0
	C	1068	0	0	88	56	1212
	D	257	51	0	0	218	526
	E	0	0	0	0	0	0
	Tot.	1333	1129	0	1385	671	4518

Stage Timings

Stage	1	2
Duration	21	17
Change Point	0	28

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	92.6%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	92.6%	-	-
1/1	A27 Link Road Left	-	-	-	-	1078	2043	2043	52.8%	1.9	0.6
1/2	A27 Link Road Ahead	-	-	-	-	1702	1839	1839	92.6%	12.1	5.7
2/2+2/1	A27 WB Off Slip Left Ahead	B	17	34	0	650	1962:1963	692+108	81.3 : 81.3%	26.1	9.3
2/3	A27 WB Off Slip Ahead	B	17	34	0	562	1962	692	81.2%	28.3	9.3
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	526	Inf : Inf	701+846	33.9 : 34.0%	2.9	1.4
4/1	Circ (East) 1 Ahead	A	21	7	28	745	1940	837	89.0%	31.5	13.5
4/2+4/3	Circ (East) 1 Ahead Right	A	21	7	28	957	2080:1911	701+515	78.7 : 78.7%	17.8	7.8
C1			PRC for Signalled Lanes (%):		1.1	Total Delay for Signalled Lanes (pcuHr):		20.38	Cycle Time (s): 51		
			PRC Over All Lanes (%):		-2.8	Total Delay Over All Lanes(pcuHr):		27.10			

Scenario 41: '2030 Base + Comm + 40 Acres + Dev (Yodel Full Dev), AM'

(FG41: '2030 Base + Comm + 40 Acres + Dev (Yodel Full Dev), AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	8	1078	0	1309	397	2792
	B	0	0	0	0	0	0
	C	1068	0	0	90	56	1214
	D	244	47	0	0	208	499
	E	0	0	0	0	0	0
	Tot.	1320	1125	0	1399	661	4505

Stage Timings

Stage	1	2
Duration	21	17
Change Point	0	28

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	93.2%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	93.2%	-	-
1/1	A27 Link Road Left	-	-	-	-	1078	2043	2043	52.8%	1.9	0.6
1/2	A27 Link Road Ahead	-	-	-	-	1714	1839	1839	93.2%	13.1	6.2
2/2+2/1	A27 WB Off Slip Left Ahead	B	17	34	0	656	1962:1963	692+110	81.8 : 81.8%	26.5	9.4
2/3	A27 WB Off Slip Ahead	B	17	34	0	558	1962	692	80.6%	27.9	9.1
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	499	Inf : Inf	701+845	32.4 : 32.2%	2.8	1.4
4/1	Circ (East) 1 Ahead	A	21	7	28	677	1940	837	80.9%	23.6	10.3
4/2+4/3	Circ (East) 1 Ahead Right	A	21	7	28	1037	2080:1911	717+460	88.1 : 88.1%	23.7	12.2
C1			PRC for Signalled Lanes (%):		2.2	Total Delay for Signalled Lanes (pcuHr):		20.44	Cycle Time (s): 51		
			PRC Over All Lanes (%):		-3.6	Total Delay Over All Lanes(pcuHr):		27.62			

(FG42: '2030 Base + Comm + 40 Acres + Dev (Yodel Full Dev), PM', Plan 1: 'Network Control Plan 1')

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	2	1152	0	427	380	1961
	B	0	0	0	0	0	0
	C	1009	0	0	61	10	1080
	D	622	41	0	0	738	1401
	E	0	0	0	0	0	0
	Tot.	1633	1193	0	488	1128	4442

Stage	1	2
Duration	14	16
Change Point	0	21

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	87.0%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	87.0%	-	-
1/1	A27 Link Road Left	-	-	-	-	1152	2043	2043	56.4%	2.0	0.6
1/2	A27 Link Road Ahead	-	-	-	-	809	1839	1839	44.0%	1.7	0.4
2/2+2/1	A27 WB Off Slip Left Ahead	B	16	27	0	566	1962:1963	776+94	65.1 : 65.1%	16.2	5.8
2/3	A27 WB Off Slip Ahead	B	16	27	0	514	1962	776	66.3%	17.5	6.0
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	1401	Inf : Inf	737+874	87.0 : 86.9%	10.6	9.3
4/1	Circ (East) 1 Ahead	A	14	7	21	261	1940	677	38.6%	14.9	2.6
4/2+4/3	Circ (East) 1 Ahead Right	A	14	7	21	548	2080:1911	276+635	60.1 : 60.1%	15.9	4.4
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):			35.8 3.5	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):			8.54 13.70	Cycle Time (s): 43		

Scenario 43: '2030 Base + Comm + 40 Acres + Dev (B2), AM'

(FG43: '2030 Base + Comm + 40 Acres + Dev (B2), AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	8	1078	0	1340	397	2823
	B	0	0	0	0	0	0
	C	1068	0	0	96	56	1220
	D	199	34	0	0	175	408
	E	0	0	0	0	0	0
	Tot.	1275	1112	0	1436	628	4451

Stage Timings

Stage	1	2
Duration	21	17
Change Point	0	28

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	94.9%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	94.9%	-	-
1/1	A27 Link Road Left	-	-	-	-	1078	2043	2043	52.8%	1.9	0.6
1/2	A27 Link Road Ahead	-	-	-	-	1745	1839	1839	94.9%	16.4	7.9
2/2+2/1	A27 WB Off Slip Left Ahead	B	17	34	0	662	1962:1963	691+117	81.9 : 81.9%	26.4	9.4
2/3	A27 WB Off Slip Ahead	B	17	34	0	558	1962	692	80.6%	27.9	9.1
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	408	Inf : Inf	701+845	26.4 : 26.4%	2.6	1.1
4/1	Circ (East) 1 Ahead	A	21	7	28	696	1940	837	83.2%	25.2	11.1
4/2+4/3	Circ (East) 1 Ahead Right	A	21	7	28	1049	2080:1911	720+453	89.5 : 89.5%	25.3	13.3
C1			PRC for Signalled Lanes (%):		0.6	Total Delay for Signalled Lanes (pcuHr):		21.45	Cycle Time (s): 51		
			PRC Over All Lanes (%):		-5.4	Total Delay Over All Lanes(pcuHr):		30.24			

(FG44: '2030 Base + Comm + 40 Acres + Dev (B2), PM', Plan 1: 'Network Control Plan 1')

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	2	1152	0	403	380	1937
	B	0	0	0	0	0	0
	C	1009	0	0	57	10	1076
	D	632	44	0	0	746	1422
	E	0	0	0	0	0	0
	Tot.	1643	1196	0	460	1136	4435

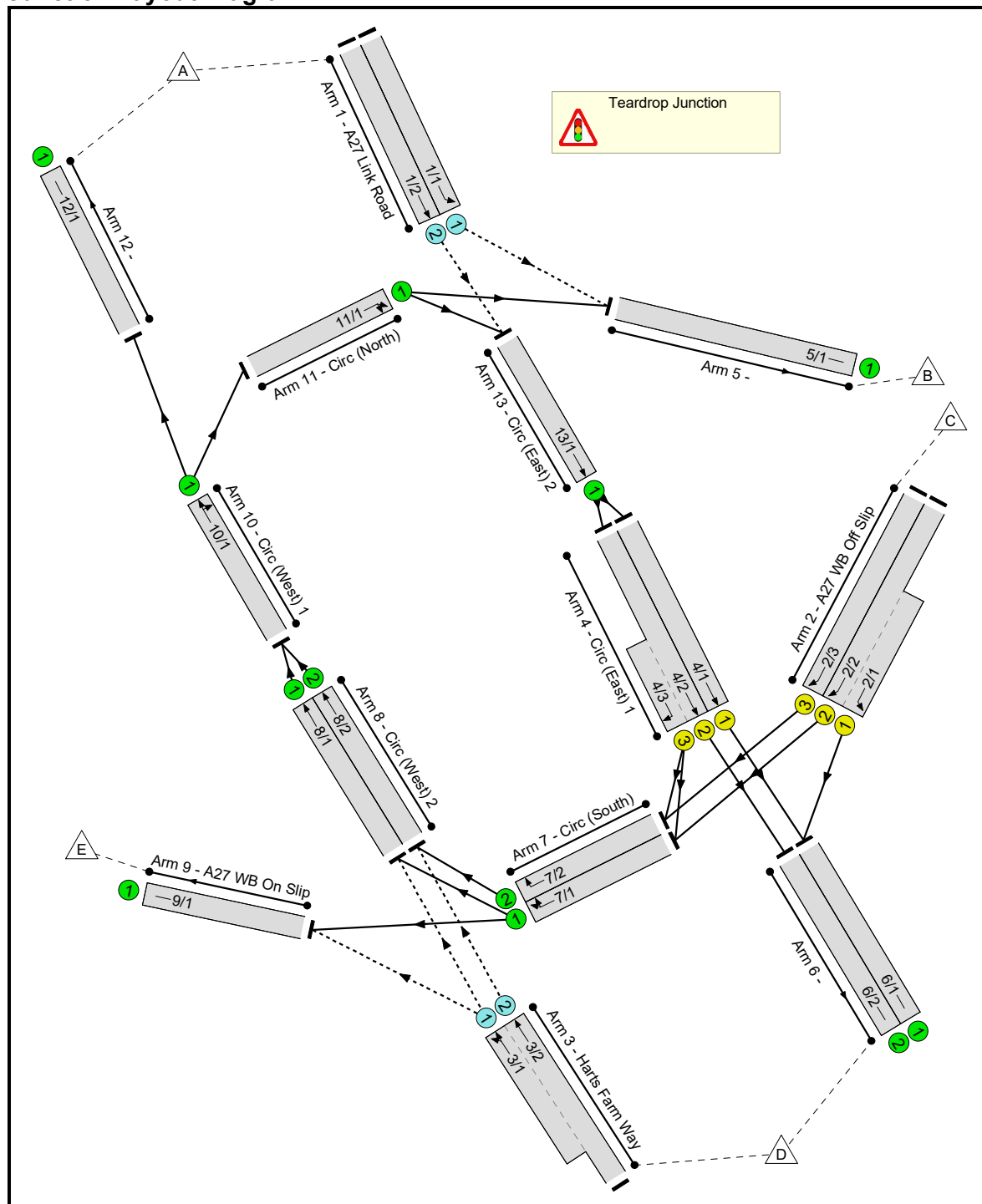
Stage	1	2
Duration	12	18
Change Point	0	19

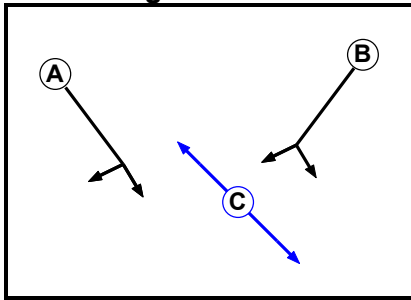
Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	88.4%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	88.4%	-	-
1/1	A27 Link Road Left	-	-	-	-	1152	2043	2043	56.4%	2.0	0.6
1/2	A27 Link Road Ahead	-	-	-	-	785	1839	1839	42.7%	1.7	0.4
2/2+2/1	A27 WB Off Slip Left Ahead	B	18	25	0	553	1962:1963	864+99	57.4 : 57.4%	13.1	5.1
2/3	A27 WB Off Slip Ahead	B	18	25	0	523	1962	867	60.3%	14.3	5.4
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	1422	Inf : Inf	730+878	88.4 : 88.4%	11.5	10.1
4/1	Circ (East) 1 Ahead	A	12	7	19	280	1940	587	47.7%	18.1	3.2
4/2+4/3	Circ (East) 1 Ahead Right	A	12	7	19	505	2080:1911	186+577	66.3 : 66.3%	19.6	4.9
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):			35.8 1.8	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):			8.25 13.79	Cycle Time (s): 43		

APPENDIX C

User and Project Details

Project:	Harts Farm Way, Havant
Title:	A27 Teardrop Junction
Design Layout Ref:	Existing Junction Layout
Additional detail:	PBA Approved Model - with Vectos Revisions
File name:	Teardrop v9.4 - Approved Model (Revised).lsg3x
Author:	David Noyce
Company:	Vectos (South) Ltd
Address:	Network Building, 97 Tottenham Court Road, London W1T 4TP

Junction Layout Diagram

Phase Diagram**Phase Input Data**

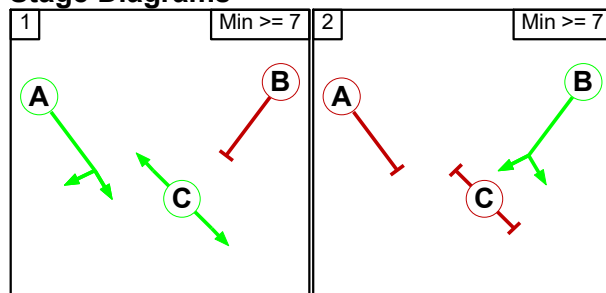
Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Pedestrian		6	6

Intergreens

		Starting Phase			
Terminating Phase		A	B	C	
	A		6	-	
	B	7		6	
	C	-	6		

Stage Data

Stage No.	Phases in Stage
1	A C
2	B

Stage Diagrams**Phase Delays**

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Lane Input Data

Junction: Teardrop Junction												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (A27 Link Road)	O		2	3	52.2	Inf	-	-	-	-	-	-
1/2 (A27 Link Road)	O		2	3	52.2	Inf	-	-	-	-	-	-
2/1 (A27 WB Off Slip)	U	B	2	3	8.7	Geom	-	3.80	0.00	Y	Arm 6 Left	91.34
2/2 (A27 WB Off Slip)	U	B	2	3	60.0	Geom	-	3.80	0.00	N	Arm 7 Ahead	17.00
2/3 (A27 WB Off Slip)	U	B	2	3	60.0	Geom	-	3.80	0.00	N	Arm 7 Ahead	17.00
3/1 (Harts Farm Way)	O		2	3	12.2	Inf	-	-	-	-	-	-
3/2 (Harts Farm Way)	O		2	3	60.0	Inf	-	-	-	-	-	-
4/1 (Circ (East) 1)	U	A	2	3	6.1	Geom	-	3.25	0.00	Y	Arm 6 Ahead	Inf
4/2 (Circ (East) 1)	U	A	2	3	60.0	Geom	-	3.25	0.00	N	Arm 6 Ahead	Inf
4/3 (Circ (East) 1)	U	A	2	3	6.1	Geom	-	3.25	0.00	N	Arm 7 Right	17.00

Give-Way Lane Input Data

Junction: Teardrop Junction											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Block Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in IG (PCU)
1/1 (A27 Link Road)	5/1 (Left)	1266	0	11/1	0.41	To 5/1 (Ahead)	-	-	-	-	-
1/2 (A27 Link Road)	13/1 (Ahead)	1339	0	11/1	0.41	All	-	-	-	-	-
3/1 (Harts Farm Way)	8/1 (Ahead)	1211	0	7/1	0.38	All	-	-	-	-	-
	9/1 (Left)	1211	0	7/1	0.38	All					
3/2 (Harts Farm Way)	8/2 (Ahead)	1211	0	7/1	0.38	All	-	-	-	-	-
				7/2	0.38	All					

Lane Connector Input Data

Junction: Teardrop Junction				
Org Lane	Dest Lane	Junction	Mean Cruise Time	Platoon Dispersion
1/1	5/1	Internal	5	35
1/2	13/1	Internal	12	35
2/1	6/1	Internal	5	35
2/2	7/1	Internal	8	N/A
2/3	7/2	Internal	8	N/A
3/1	8/1	Internal	12	35
3/1	9/1	Internal	5	35
3/2	8/2	Internal	12	35
4/1	6/1	Internal	5	35
4/2	6/2	Internal	5	35
4/3	7/1	Internal	8	N/A
4/3	7/2	Internal	7	N/A
7/1	8/1	Internal	11	35
7/1	9/1	Internal	5	35
7/2	8/2	Internal	10	35
8/1	10/1	Internal	13	35
8/2	10/1	Internal	13	35
10/1	11/1	Internal	2	35
10/1	12/1	Internal	5	35
11/1	5/1	Internal	5	35
11/1	13/1	Internal	11	35
13/1	4/1	Internal	5	35
13/1	4/2	Internal	5	35

(FG1: '2016 Base, AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	7	868	0	1032	291	2198
	B	0	0	0	0	0	0
	C	868	5	0	66	46	985
	D	165	15	0	0	137	317
	E	0	0	0	0	0	0
	Tot.	1040	888	0	1098	474	3500

Stage	1	2
Duration	20	18
Change Point	0	27

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	100.0%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	100.0%	-	-
1/1	A27 Link Road Left	-	-	-	-	868	Inf	1258	69.0%	4.6	1.1
1/2	A27 Link Road Ahead	-	-	-	-	1330	Inf	1331	100.0%	48.9	32.5
2/2+2/1	A27 WB Off Slip Left Ahead	B	18	33	0	386	1962:1963	721+149	44.4 : 44.4%	15.5	3.8
2/3	A27 WB Off Slip Ahead	B	18	33	0	599	1962	731	81.9%	27.7	9.9
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	317	Inf : Inf	781+977	18.0 : 18.0%	1.6	0.5
4/1	Circ (East) 1 Ahead	A	20	7	27	507	1940	799	63.5%	18.1	6.5
4/2+4/3	Circ (East) 1 Ahead Right	A	20	7	27	823	2080:1911	706+401	74.3 : 74.3%	17.6	7.3
C1	PRC for Signalled Lanes (%): 9.8 PRC Over All Lanes (%): -11.1			Total Delay for Signalled Lanes (pcuHr): 12.82 Total Delay Over All Lanes(pcuHr): 32.15			Cycle Time (s): 51				

(FG2: '2016 Base, PM', Plan 1: 'Network Control Plan 1')

Desired Flow :

		Destination					
Origin		A	B	C	D	E	Tot.
	A	2	941	0	328	296	1567
	B	0	0	0	0	0	0
	C	813	3	0	46	8	870
	D	501	22	0	0	597	1120
	E	0	0	0	0	0	0
	Tot.	1316	966	0	374	901	3557

Stage	1	2
Duration	13	17
Change Point	0	20

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	74.9%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	74.9%	-	-
1/1	A27 Link Road Left	-	-	-	-	941	Inf	1256	74.9%	5.7	1.5
1/2	A27 Link Road Ahead	-	-	-	-	626	Inf	1329	47.1%	2.6	0.4
2/2+2/1	A27 WB Off Slip Left Ahead	B	17	26	0	306	1962:1963	819+145	31.7 : 31.7%	11.0	2.3
2/3	A27 WB Off Slip Ahead	B	17	26	0	564	1962	821	68.7%	17.1	6.6
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	1120	Inf : Inf	808+999	62.0 : 62.0%	3.1	3.0
4/1	Circ (East) 1 Ahead	A	13	7	20	161	1940	632	25.5%	14.5	1.6
4/2+4/3	Circ (East) 1 Ahead Right	A	13	7	20	465	2080:1911	334+597	49.9 : 49.9%	15.1	3.3
C1	PRC for Signalled Lanes (%): 31.1			Total Delay for Signalled Lanes (pcuHr): 6.22		Cycle Time (s): 43					
	PRC Over All Lanes (%): 20.1			Total Delay Over All Lanes(pcuHr): 9.12							

(FG4: '2025 Base + Comm + 40 Acres, AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	8	1022	0	1183	378	2591
	B	0	0	0	0	0	0
	C	1011	0	0	76	53	1140
	D	178	29	0	0	157	364
	E	0	0	0	0	0	0
	Tot.	1197	1051	0	1259	588	4095

Stage	1	2
Duration	21	17
Change Point	0	28

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	118.2%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	118.2%	-	-
1/1	A27 Link Road Left	-	-	-	-	1022	Inf	1254	81.5%	7.6	2.2
1/2	A27 Link Road Ahead	-	-	-	-	1569	Inf	1327	118.2%	304.7	190.9
2/2+2/1	A27 WB Off Slip Left Ahead	B	17	34	0	617	1962:1963	692+97	78.1 : 78.1%	24.5	8.5
2/3	A27 WB Off Slip Ahead	B	17	34	0	523	1962	692	75.5%	25.0	7.9
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	364	Inf : Inf	748+882	22.3 : 22.3%	2.3	0.8
4/1	Circ (East) 1 Ahead	A	21	7	28	601	1940	837	60.7%	16.6	6.3
4/2+4/3	Circ (East) 1 Ahead Right	A	21	7	28	968	2080:1911	713+473	69.0 : 69.0%	15.3	6.2
C1	PRC for Signalled Lanes (%): 15.2 PRC Over All Lanes (%): -31.4			Total Delay for Signalled Lanes (pcuHr): 13.67 Total Delay Over All Lanes(pcuHr): 148.85				Cycle Time (s): 51			

(FG5: '2025 Base + Comm + 40 Acres, PM', Plan 1: 'Network Control Plan 1')

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	2	1091	0	374	360	1827
	B	0	0	0	0	0	0
	C	956	0	0	52	9	1017
	D	564	32	0	0	680	1276
	E	0	0	0	0	0	0
	Tot.	1522	1123	0	426	1049	4120

Stage	1	2
Duration	16	14
Change Point	0	23

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	87.1%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	87.1%	-	-
1/1	A27 Link Road Left	-	-	-	-	1091	Inf	1253	87.1%	10.7	3.2
1/2	A27 Link Road Ahead	-	-	-	-	736	Inf	1326	55.5%	3.0	0.6
2/2+2/1	A27 WB Off Slip Left Ahead	B	14	29	0	543	1962:1963	684+72	71.7 : 71.7%	20.2	6.3
2/3	A27 WB Off Slip Ahead	B	14	29	0	474	1962	684	69.3%	20.5	5.9
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	1276	Inf : Inf	764+887	77.2 : 77.3%	6.4	6.3
4/1	Circ (East) 1 Ahead	A	16	7	23	224	1940	767	29.2%	12.2	2.0
4/2+4/3	Circ (East) 1 Ahead Right	A	16	7	23	512	2080:1911	291+701	51.6 : 51.6%	13.1	3.7
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):			25.5 3.3	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):			8.37 14.51	Cycle Time (s): 43		

(FG6: '2025 Base + Comm + 40 Acres + Dev (Amazon), AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	8	1022	0	1242	378	2650
	B	0	0	0	0	0	0
	C	1011	0	0	86	53	1150
	D	223	42	0	0	191	456
	E	0	0	0	0	0	0
	Tot.	1242	1064	0	1328	622	4256

Stage	1	2
Duration	21	17
Change Point	0	28

[illegible]

(FG8: '2025 Base + Comm + 40 Acres + Dev (TNT), AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	8	1022	0	1223	378	2631
	B	0	0	0	0	0	0
	C	1011	0	0	83	53	1147
	D	192	33	0	0	168	393
	E	0	0	0	0	0	0
	Tot.	1211	1055	0	1306	599	4171

Stage	1	2
Duration	21	17
Change Point	0	28

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	121.4%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	121.4%	-	-
1/1	A27 Link Road Left	-	-	-	-	1022	Inf	1252	81.6%	7.7	2.2
1/2	A27 Link Road Ahead	-	-	-	-	1609	Inf	1325	121.4%	346.1	213.0
2/2+2/1	A27 WB Off Slip Left Ahead	B	17	34	0	625	1962:1963	692+106	78.3 : 78.3%	24.5	8.5
2/3	A27 WB Off Slip Ahead	B	17	34	0	522	1962	692	75.4%	24.9	7.9
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	393	Inf : Inf	751+885	24.0 : 24.1%	2.3	0.9
4/1	Circ (East) 1 Ahead	A	21	7	28	625	1940	837	61.5%	16.8	6.4
4/2+4/3	Circ (East) 1 Ahead Right	A	21	7	28	984	2080:1911	717+463	68.7 : 68.7%	15.3	6.2
C1	PRC for Signalled Lanes (%): 14.9 PRC Over All Lanes (%): -34.9			Total Delay for Signalled Lanes (pcuHr): 13.72 Total Delay Over All Lanes(pcuHr): 170.86				Cycle Time (s): 51			

(FG9: '2025 Base + Comm + 40 Acres + Dev (TNT), PM', Plan 1: 'Network Control Plan 1')

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	2	1091	0	415	360	1868
	B	0	0	0	0	0	0
	C	956	0	0	60	9	1025
	D	579	36	0	0	691	1306
	E	0	0	0	0	0	0
	Tot.	1537	1127	0	475	1060	4199

Stage	1	2
Duration	17	13
Change Point	0	24

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	87.2%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	87.2%	-	-
1/1	A27 Link Road Left	-	-	-	-	1091	Inf	1251	87.2%	10.8	3.3
1/2	A27 Link Road Ahead	-	-	-	-	777	Inf	1324	58.7%	3.3	0.7
2/2+2/1	A27 WB Off Slip Left Ahead	B	13	30	0	551	1962:1963	639+78	76.9 : 76.9%	23.4	6.8
2/3	A27 WB Off Slip Ahead	B	13	30	0	474	1962	639	74.2%	23.6	6.4
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	1306	Inf : Inf	765+887	79.1 : 79.0%	7.0	6.7
4/1	Circ (East) 1 Ahead	A	17	7	24	227	1940	812	28.0%	11.3	2.0
4/2+4/3	Circ (East) 1 Ahead Right	A	17	7	24	550	2080:1911	374+719	50.3 : 50.3%	12.0	3.5
C1	PRC for Signalled Lanes (%): 17.1 PRC Over All Lanes (%): 3.2			Total Delay for Signalled Lanes (pcuHr): 9.23 Total Delay Over All Lanes(pcuHr): 15.76				Cycle Time (s): 43			

(FG10: '2025 Base + Comm + 40 Acres + Dev (B8), AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	8	1022	0	1238	378	2646
	B	0	0	0	0	0	0
	C	1011	0	0	85	53	1149
	D	190	33	0	0	166	389
	E	0	0	0	0	0	0
	Tot.	1209	1055	0	1323	597	4184

Stage	1	2
Duration	21	17
Change Point	0	28

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	122.5%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	122.5%	-	-
1/1	A27 Link Road Left	-	-	-	-	1022	Inf	1252	81.6%	7.7	2.2
1/2	A27 Link Road Ahead	-	-	-	-	1624	Inf	1325	122.5%	360.5	221.0
2/2+2/1	A27 WB Off Slip Left Ahead	B	17	34	0	627	1962:1963	692+108	78.4 : 78.4%	24.5	8.5
2/3	A27 WB Off Slip Ahead	B	17	34	0	522	1962	692	75.4%	24.9	7.9
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	389	Inf : Inf	752+886	23.7 : 23.8%	2.3	0.9
4/1	Circ (East) 1 Ahead	A	21	7	28	634	1940	837	61.8%	16.9	6.4
4/2+4/3	Circ (East) 1 Ahead Right	A	21	7	28	990	2080:1911	718+459	68.7 : 68.7%	15.3	6.3
C1	PRC for Signalled Lanes (%): 14.9 PRC Over All Lanes (%): -36.2			Total Delay for Signalled Lanes (pcuHr): 13.74 Total Delay Over All Lanes(pcuHr): 178.80			Cycle Time (s): 51				

Scenario 11: '2025 Base + Comm + 40 Acres + Dev (B8), PM'

(FG11: '2025 Base + Comm + 40 Acres + Dev (B8), PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	2	1091	0	401	360	1854
	B	0	0	0	0	0	0
	C	956	0	0	57	9	1022
	D	585	38	0	0	696	1319
	E	0	0	0	0	0	0
	Tot.	1543	1129	0	458	1065	4195

Stage Timings

Stage	1	2
Duration	18	12
Change Point	0	25

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	87.3%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	87.3%	-	-
1/1	A27 Link Road Left	-	-	-	-	1091	Inf	1250	87.3%	10.9	3.3
1/2	A27 Link Road Ahead	-	-	-	-	763	Inf	1323	57.7%	3.2	0.7
2/2+2/1	A27 WB Off Slip Left Ahead	B	12	31	0	545	1962:1963	593+69	82.3 : 82.3%	28.4	7.5
2/3	A27 WB Off Slip Ahead	B	12	31	0	477	1962	593	80.4%	28.8	7.2
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	1319	Inf : Inf	766+888	79.8 : 79.7%	7.3	7.0
4/1	Circ (East) 1 Ahead	A	18	7	25	224	1940	857	26.1%	10.4	1.9
4/2+4/3	Circ (East) 1 Ahead Right	A	18	7	25	539	2080:1911	369+754	48.0 : 48.0%	11.0	3.4
C1			PRC for Signalled Lanes (%):		9.4	Total Delay for Signalled Lanes (pcuHr):		10.42	Cycle Time (s): 43		
			PRC Over All Lanes (%):		3.1	Total Delay Over All Lanes(pcuHr):		17.07			

(FG12: '2025 Base + Comm + 40 Acres + Dev (Yodel), AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	8	1022	0	1250	378	2658
	B	0	0	0	0	0	0
	C	1011	0	0	87	53	1151
	D	215	40	0	0	185	440
	E	0	0	0	0	0	0
	Tot.	1234	1062	0	1337	616	4249

Stage	1	2
Duration	21	17
Change Point	0	28

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	123.7%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	123.7%	-	-
1/1	A27 Link Road Left	-	-	-	-	1022	Inf	1249	81.8%	7.8	2.2
1/2	A27 Link Road Ahead	-	-	-	-	1636	Inf	1322	123.7%	375.2	228.9
2/2+2/1	A27 WB Off Slip Left Ahead	B	17	34	0	629	1962:1963	691+111	78.4 : 78.4%	24.4	8.6
2/3	A27 WB Off Slip Ahead	B	17	34	0	522	1962	692	75.4%	24.9	7.9
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	440	Inf : Inf	753+887	26.7 : 26.9%	2.4	1.1
4/1	Circ (East) 1 Ahead	A	21	7	28	641	1940	837	61.9%	16.9	6.4
4/2+4/3	Circ (East) 1 Ahead Right	A	21	7	28	995	2080:1911	719+456	68.5 : 68.5%	15.3	6.1
C1	PRC for Signalled Lanes (%): 14.8 PRC Over All Lanes (%): -37.5			Total Delay for Signalled Lanes (pcuHr): 13.73 Total Delay Over All Lanes(pcuHr): 186.72				Cycle Time (s): 51			

Scenario 13: '2025 Base + Comm + 40 Acres + Dev (Yodal), PM'

(FG13: '2025 Base + Comm + 40 Acres + Dev (Yodel), PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	2	1091	0	396	360	1849
	B	0	0	0	0	0	0
	C	956	0	0	56	9	1021
	D	592	40	0	0	701	1333
	E	0	0	0	0	0	0
	Tot.	1550	1131	0	452	1070	4203

Stage Timings

Stage	1	2
Duration	18	12
Change Point	0	25

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	87.3%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	87.3%	-	-
1/1	A27 Link Road Left	-	-	-	-	1091	Inf	1249	87.3%	10.9	3.3
1/2	A27 Link Road Ahead	-	-	-	-	758	Inf	1322	57.3%	3.2	0.7
2/2+2/1	A27 WB Off Slip Left Ahead	B	12	31	0	544	1962:1963	593+68	82.3 : 82.3%	28.4	7.5
2/3	A27 WB Off Slip Ahead	B	12	31	0	477	1962	593	80.4%	28.8	7.2
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	1333	Inf : Inf	766+888	80.6 : 80.6%	7.6	7.2
4/1	Circ (East) 1 Ahead	A	18	7	25	223	1940	857	26.0%	10.4	1.8
4/2+4/3	Circ (East) 1 Ahead Right	A	18	7	25	535	2080:1911	361+756	47.9 : 47.9%	11.1	3.4
C1			PRC for Signalled Lanes (%):		9.4	Total Delay for Signalled Lanes (pcuHr):		10.40	Cycle Time (s): 43		
			PRC Over All Lanes (%):		3.1	Total Delay Over All Lanes(pcuHr):		17.19			

(FG18: '2025 Base + Comm + 40 Acres + Dev (Amazon Full Dev), AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	8	1022	0	1230	378	2638
	B	0	0	0	0	0	0
	C	1011	0	0	84	53	1148
	D	247	50	0	0	209	506
	E	0	0	0	0	0	0
	Tot.	1266	1072	0	1314	640	4292

Stage	1	2
Duration	21	17
Change Point	0	28

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	122.6%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	122.6%	-	-
1/1	A27 Link Road Left	-	-	-	-	1022	Inf	1245	82.1%	7.9	2.2
1/2	A27 Link Road Ahead	-	-	-	-	1616	Inf	1318	122.6%	361.1	220.2
2/2+2/1	A27 WB Off Slip Left Ahead	B	17	34	0	626	1962:1963	692+107	78.4 : 78.4%	24.5	8.5
2/3	A27 WB Off Slip Ahead	B	17	34	0	522	1962	692	75.4%	24.9	7.9
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	506	Inf : Inf	752+886	30.8 : 30.9%	2.6	1.3
4/1	Circ (East) 1 Ahead	A	21	7	28	630	1940	837	61.4%	16.8	6.4
4/2+4/3	Circ (East) 1 Ahead Right	A	21	7	28	986	2080:1911	717+461	68.3 : 68.3%	15.2	6.1
C1	PRC for Signalled Lanes (%): 14.9			Total Delay for Signalled Lanes (pcuHr): 13.68		Cycle Time (s): 51					
	PRC Over All Lanes (%): -36.2			Total Delay Over All Lanes(pcuHr): 178.35							

(FG20: '2025 Base + Comm + 40 Acres + Dev (Yodel Full Dev), AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	8	1022	0	1242	378	2650
	B	0	0	0	0	0	0
	C	1011	0	0	86	53	1150
	D	234	46	0	0	199	479
	E	0	0	0	0	0	0
	Tot.	1253	1068	0	1328	630	4279

Stage	1	2
Duration	21	17
Change Point	0	28

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	123.3%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	123.3%	-	-
1/1	A27 Link Road Left	-	-	-	-	1022	Inf	1247	82.0%	7.8	2.2
1/2	A27 Link Road Ahead	-	-	-	-	1628	Inf	1320	123.3%	370.5	225.8
2/2+2/1	A27 WB Off Slip Left Ahead	B	17	34	0	628	1962:1963	692+110	78.4 : 78.4%	24.5	8.6
2/3	A27 WB Off Slip Ahead	B	17	34	0	522	1962	692	75.4%	24.9	7.9
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	479	Inf : Inf	753+887	29.1 : 29.3%	2.5	1.2
4/1	Circ (East) 1 Ahead	A	21	7	28	637	1940	837	61.7%	16.9	6.4
4/2+4/3	Circ (East) 1 Ahead Right	A	21	7	28	991	2080:1911	718+458	68.3 : 68.3%	15.3	6.1
C1	PRC for Signalled Lanes (%): 14.8 PRC Over All Lanes (%): -37.0			Total Delay for Signalled Lanes (pcuHr): 13.71 Total Delay Over All Lanes(pcuHr): 183.82				Cycle Time (s): 51			

(FG23: '2030 Base + Comm + 40 Acres, AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	8	1078	0	1250	397	2733
	B	0	0	0	0	0	0
	C	1068	0	0	80	56	1204
	D	188	30	0	0	165	383
	E	0	0	0	0	0	0
	Tot.	1264	1108	0	1330	618	4320

Stage	1	2
Duration	21	17
Change Point	0	28

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	124.8%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	124.8%	-	-
1/1	A27 Link Road Left	-	-	-	-	1078	Inf	1253	86.0%	9.9	3.0
1/2	A27 Link Road Ahead	-	-	-	-	1655	Inf	1327	124.8%	388.0	237.0
2/2+2/1	A27 WB Off Slip Left Ahead	B	17	34	0	650	1962:1963	692+97	82.3 : 82.3%	27.1	9.5
2/3	A27 WB Off Slip Ahead	B	17	34	0	554	1962	692	80.0%	27.5	8.9
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	383	Inf : Inf	732+872	23.8 : 24.0%	2.5	1.0
4/1	Circ (East) 1 Ahead	A	21	7	28	644	1940	837	61.7%	16.8	6.4
4/2+4/3	Circ (East) 1 Ahead Right	A	21	7	28	1011	2080:1911	712+476	68.2 : 68.2%	15.2	6.1
C1	PRC for Signalled Lanes (%): 9.3 PRC Over All Lanes (%): -38.6			Total Delay for Signalled Lanes (pcuHr): 14.95 Total Delay Over All Lanes(pcuHr): 196.57			Cycle Time (s): 51				

(FG24: '2030 Base + Comm + 40 Acres, PM', Plan 1: 'Network Control Plan 1')

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	2	1152	0	395	380	1929
	B	0	0	0	0	0	0
	C	1009	0	0	55	10	1074
	D	596	34	0	0	719	1349
	E	0	0	0	0	0	0
	Tot.	1607	1186	0	450	1109	4352

Stage	1	2
Duration	17	13
Change Point	0	24

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	92.0%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	92.0%	-	-
1/1	A27 Link Road Left	-	-	-	-	1152	Inf	1252	92.0%	16.3	5.2
1/2	A27 Link Road Ahead	-	-	-	-	777	Inf	1325	58.6%	3.3	0.7
2/2+2/1	A27 WB Off Slip Left Ahead	B	13	30	0	571	1962:1963	639+68	80.8 : 80.8%	25.8	7.6
2/3	A27 WB Off Slip Ahead	B	13	30	0	503	1962	639	78.7%	26.1	7.1
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	1349	Inf : Inf	743+870	83.7 : 83.6%	9.0	8.0
4/1	Circ (East) 1 Ahead	A	17	7	24	241	1940	812	29.7%	11.5	2.1
4/2+4/3	Circ (East) 1 Ahead Right	A	17	7	24	536	2080:1911	296+735	52.0 : 52.0%	12.4	3.8
C1	PRC for Signalled Lanes (%): 11.4 PRC Over All Lanes (%): -2.3			Total Delay for Signalled Lanes (pcuHr): 10.35 Total Delay Over All Lanes(pcuHr): 19.66				Cycle Time (s): 43			

(FG25: '2030 Base + Comm + 40 Acres + Dev (Amazon), AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	8	1078	0	1310	397	2793
	B	0	0	0	0	0	0
	C	1068	0	0	90	56	1214
	D	233	44	0	0	200	477
	E	0	0	0	0	0	0
	Tot.	1309	1122	0	1400	653	4484

Stage	1	2
Duration	21	17
Change Point	0	28

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	129.8%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	129.8%	-	-
1/1	A27 Link Road Left	-	-	-	-	1078	Inf	1248	86.4%	10.2	3.1
1/2	A27 Link Road Ahead	-	-	-	-	1715	Inf	1321	129.8%	447.7	272.1
2/2+2/1	A27 WB Off Slip Left Ahead	B	17	34	0	660	1962:1963	692+109	82.4 : 82.4%	26.9	9.6
2/3	A27 WB Off Slip Ahead	B	17	34	0	554	1962	692	80.0%	27.5	8.9
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	477	Inf : Inf	736+877	29.5 : 29.7%	2.7	1.3
4/1	Circ (East) 1 Ahead	A	21	7	28	680	1940	837	62.6%	17.0	6.5
4/2+4/3	Circ (East) 1 Ahead Right	A	21	7	28	1035	2080:1911	717+461	67.7 : 67.7%	15.1	6.0
C1	PRC for Signalled Lanes (%): 9.2 PRC Over All Lanes (%): -44.3			Total Delay for Signalled Lanes (pcuHr): 15.00 Total Delay Over All Lanes(pcuHr): 231.68				Cycle Time (s): 51			

(FG26: '2030 Base + Comm + 40 Acres + Dev (Amazon), PM', Plan 1: 'Network Control Plan 1')

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	2	1152	0	452	380	1986
	B	0	0	0	0	0	0
	C	1009	0	0	65	10	1084
	D	645	48	0	0	755	1448
	E	0	0	0	0	0	0
	Tot.	1656	1200	0	517	1145	4518

Stage	1	2
Duration	12	18
Change Point	0	19

[illegible]

(FG27: '2030 Base + Comm + 40 Acres + Dev (TNT), AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	8	1078	0	1290	397	2773
	B	0	0	0	0	0	0
	C	1068	0	0	87	56	1211
	D	202	35	0	0	176	413
	E	0	0	0	0	0	0
	Tot.	1278	1113	0	1377	629	4397

Stage	1	2
Duration	21	17
Change Point	0	28

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	128.0%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	128.0%	-	-
1/1	A27 Link Road Left	-	-	-	-	1078	Inf	1251	86.1%	10.0	3.0
1/2	A27 Link Road Ahead	-	-	-	-	1695	Inf	1324	128.0%	426.2	259.6
2/2+2/1	A27 WB Off Slip Left Ahead	B	17	34	0	657	1962:1963	692+106	82.4 : 82.4%	27.0	9.5
2/3	A27 WB Off Slip Ahead	B	17	34	0	554	1962	692	80.0%	27.5	8.9
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	413	Inf : Inf	735+875	25.6 : 25.7%	2.5	1.1
4/1	Circ (East) 1 Ahead	A	21	7	28	668	1940	837	62.4%	17.0	6.5
4/2+4/3	Circ (East) 1 Ahead Right	A	21	7	28	1027	2080:1911	716+466	67.9 : 67.9%	15.2	6.0
C1	PRC for Signalled Lanes (%): 9.2 PRC Over All Lanes (%): -42.2			Total Delay for Signalled Lanes (pcuHr): 15.00 Total Delay Over All Lanes(pcuHr): 218.98				Cycle Time (s): 51			

(FG30: '2030 Base + Comm + 40 Acres + Dev (B8), PM', Plan 1: 'Network Control Plan 1')

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	2	1152	0	423	380	1957
	B	0	0	0	0	0	0
	C	1009	0	0	60	10	1079
	D	617	40	0	0	735	1392
	E	0	0	0	0	0	0
	Tot.	1628	1192	0	483	1125	4428

Stage	1	2
Duration	18	12
Change Point	0	25

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	92.2%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	92.2%	-	-
1/1	A27 Link Road Left	-	-	-	-	1152	Inf	1249	92.2%	16.7	5.3
1/2	A27 Link Road Ahead	-	-	-	-	805	Inf	1322	60.9%	3.5	0.8
2/2+2/1	A27 WB Off Slip Left Ahead	B	12	31	0	574	1962:1963	593+69	86.7 : 86.7%	32.9	8.7
2/3	A27 WB Off Slip Ahead	B	12	31	0	505	1962	593	85.1%	33.3	8.3
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	1392	Inf : Inf	744+871	86.2 : 86.3%	10.5	9.1
4/1	Circ (East) 1 Ahead	A	18	7	25	244	1940	857	28.5%	10.6	2.0
4/2+4/3	Circ (East) 1 Ahead Right	A	18	7	25	561	2080:1911	355+757	50.5 : 50.5%	11.3	3.6
C1	PRC for Signalled Lanes (%): 3.9 PRC Over All Lanes (%): -2.5			Total Delay for Signalled Lanes (pcuHr): 12.40 Total Delay Over All Lanes(pcuHr): 22.58				Cycle Time (s): 43			

(FG31: '2030 Base + Comm + 40 Acres + Dev (Yodel), AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	8	1078	0	1317	397	2800
	B	0	0	0	0	0	0
	C	1068	0	0	92	56	1216
	D	226	42	0	0	194	462
	E	0	0	0	0	0	0
	Tot.	1302	1120	0	1409	647	4478

Stage	1	2
Duration	21	17
Change Point	0	28

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	130.3%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	130.3%	-	-
1/1	A27 Link Road Left	-	-	-	-	1078	Inf	1249	86.3%	10.2	3.1
1/2	A27 Link Road Ahead	-	-	-	-	1722	Inf	1322	130.3%	452.7	275.5
2/2+2/1	A27 WB Off Slip Left Ahead	B	17	34	0	662	1962:1963	691+112	82.4 : 82.4%	26.9	9.6
2/3	A27 WB Off Slip Ahead	B	17	34	0	554	1962	692	80.0%	27.5	8.9
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	462	Inf : Inf	737+877	28.5 : 28.7%	2.6	1.3
4/1	Circ (East) 1 Ahead	A	21	7	28	684	1940	837	62.7%	17.1	6.5
4/2+4/3	Circ (East) 1 Ahead Right	A	21	7	28	1038	2080:1911	718+459	67.7 : 67.7%	15.1	6.0
C1	PRC for Signalled Lanes (%): 9.2 PRC Over All Lanes (%): -44.8			Total Delay for Signalled Lanes (pcuHr): 15.02 Total Delay Over All Lanes(pcuHr): 234.96				Cycle Time (s): 51			

Scenario 32: '2030 Base + Comm + 40 Acres + Dev (Yodel), PM'

(FG32: '2030 Base + Comm + 40 Acres + Dev (Yodel), PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	2	1152	0	417	380	1951
	B	0	0	0	0	0	0
	C	1009	0	0	59	10	1078
	D	624	42	0	0	740	1406
	E	0	0	0	0	0	0
	Tot.	1635	1194	0	476	1130	4435

Stage Timings

Stage	1	2
Duration	18	12
Change Point	0	25

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	92.3%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	92.3%	-	-
1/1	A27 Link Road Left	-	-	-	-	1152	Inf	1249	92.3%	16.8	5.4
1/2	A27 Link Road Ahead	-	-	-	-	799	Inf	1322	60.5%	3.4	0.8
2/2+2/1	A27 WB Off Slip Left Ahead	B	12	31	0	573	1962:1963	593+68	86.7 : 86.7%	32.9	8.7
2/3	A27 WB Off Slip Ahead	B	12	31	0	505	1962	593	85.1%	33.3	8.3
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	1406	Inf : Inf	744+871	87.2 : 87.1%	11.1	9.4
4/1	Circ (East) 1 Ahead	A	18	7	25	243	1940	857	28.3%	10.6	2.0
4/2+4/3	Circ (East) 1 Ahead Right	A	18	7	25	556	2080:1911	346+759	50.3 : 50.3%	11.3	3.6
C1			PRC for Signalled Lanes (%):		3.9	Total Delay for Signalled Lanes (pcuHr):		12.38	Cycle Time (s): 43		
			PRC Over All Lanes (%):		-2.5	Total Delay Over All Lanes(pcuHr):		22.84			

(FG37: '2030 Base + Comm + 40 Acres + Dev (Amazon Full Dev), AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	8	1078	0	1297	397	2780
	B	0	0	0	0	0	0
	C	1068	0	0	88	56	1212
	D	257	51	0	0	218	526
	E	0	0	0	0	0	0
	Tot.	1333	1129	0	1385	671	4518

Stage	1	2
Duration	21	17
Change Point	0	28

[illegible]

(FG39: '2030 Base + Comm + 40 Acres + Dev (Yodel Full Dev), AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	8	1078	0	1309	397	2792
	B	0	0	0	0	0	0
	C	1068	0	0	90	56	1214
	D	244	47	0	0	208	499
	E	0	0	0	0	0	0
	Tot.	1320	1125	0	1399	661	4505

Stage	1	2
Duration	21	17
Change Point	0	28

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	129.9%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	129.9%	-	-
1/1	A27 Link Road Left	-	-	-	-	1078	Inf	1246	86.5%	10.3	3.1
1/2	A27 Link Road Ahead	-	-	-	-	1714	Inf	1320	129.9%	448.2	272.2
2/2+2/1	A27 WB Off Slip Left Ahead	B	17	34	0	660	1962:1963	692+109	82.4 : 82.4%	26.9	9.6
2/3	A27 WB Off Slip Ahead	B	17	34	0	554	1962	692	80.0%	27.5	8.9
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	499	Inf : Inf	736+877	30.8 : 31.0%	2.7	1.4
4/1	Circ (East) 1 Ahead	A	21	7	28	680	1940	837	62.6%	17.0	6.5
4/2+4/3	Circ (East) 1 Ahead Right	A	21	7	28	1034	2080:1911	717+462	67.6 : 67.6%	15.1	6.0
C1	PRC for Signalled Lanes (%): 9.2 PRC Over All Lanes (%): -44.3			Total Delay for Signalled Lanes (pcuHr): 14.99 Total Delay Over All Lanes(pcuHr): 231.84				Cycle Time (s): 51			

(FG40: '2030 Base + Comm + 40 Acres + Dev (Yodel Full Dev), PM', Plan 1: 'Network Control Plan 1')

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	2	1152	0	427	380	1961
	B	0	0	0	0	0	0
	C	1009	0	0	61	10	1080
	D	622	41	0	0	738	1401
	E	0	0	0	0	0	0
	Tot.	1633	1193	0	488	1128	4442

Stage	1	2
Duration	12	18
Change Point	0	19

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27 Teardrop Junction	-	-	-	-	-	-	-	-	92.2%	-	-
Teardrop Junction	-	-	-	-	-	-	-	-	92.2%	-	-
1/1	A27 Link Road Left	-	-	-	-	1152	Inf	1249	92.2%	16.7	5.4
1/2	A27 Link Road Ahead	-	-	-	-	809	Inf	1322	61.2%	3.5	0.8
2/2+2/1	A27 WB Off Slip Left Ahead	B	18	25	0	583	1962:1963	864+101	60.4 : 60.4%	13.6	5.4
2/3	A27 WB Off Slip Ahead	B	18	25	0	497	1962	867	57.3%	13.8	5.1
3/2+3/1	Harts Farm Way Ahead Left	-	-	-	-	1401	Inf : Inf	730+868	87.6 : 87.7%	11.0	9.7
4/1	Circ (East) 1 Ahead	A	12	7	19	277	1940	587	47.2%	18.0	3.1
4/2+4/3	Circ (East) 1 Ahead Right	A	12	7	19	532	2080:1911	225+574	66.6 : 66.6%	19.3	4.9
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):			35.1 -2.5	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):			8.35 18.75	Cycle Time (s): 43		

APPENDIX D

Tracsis^{plc}

Traffic and Data Services

Client: Paul Basham Associates

Project: 3259-LON-JB Bedhampton

Survey Date: Tuesday 05 July 2016

Survey Period: 07:00-10:00, 16:00-19:00

AM Weather: Dry with some bright spells

PM Weather: Dry and bright

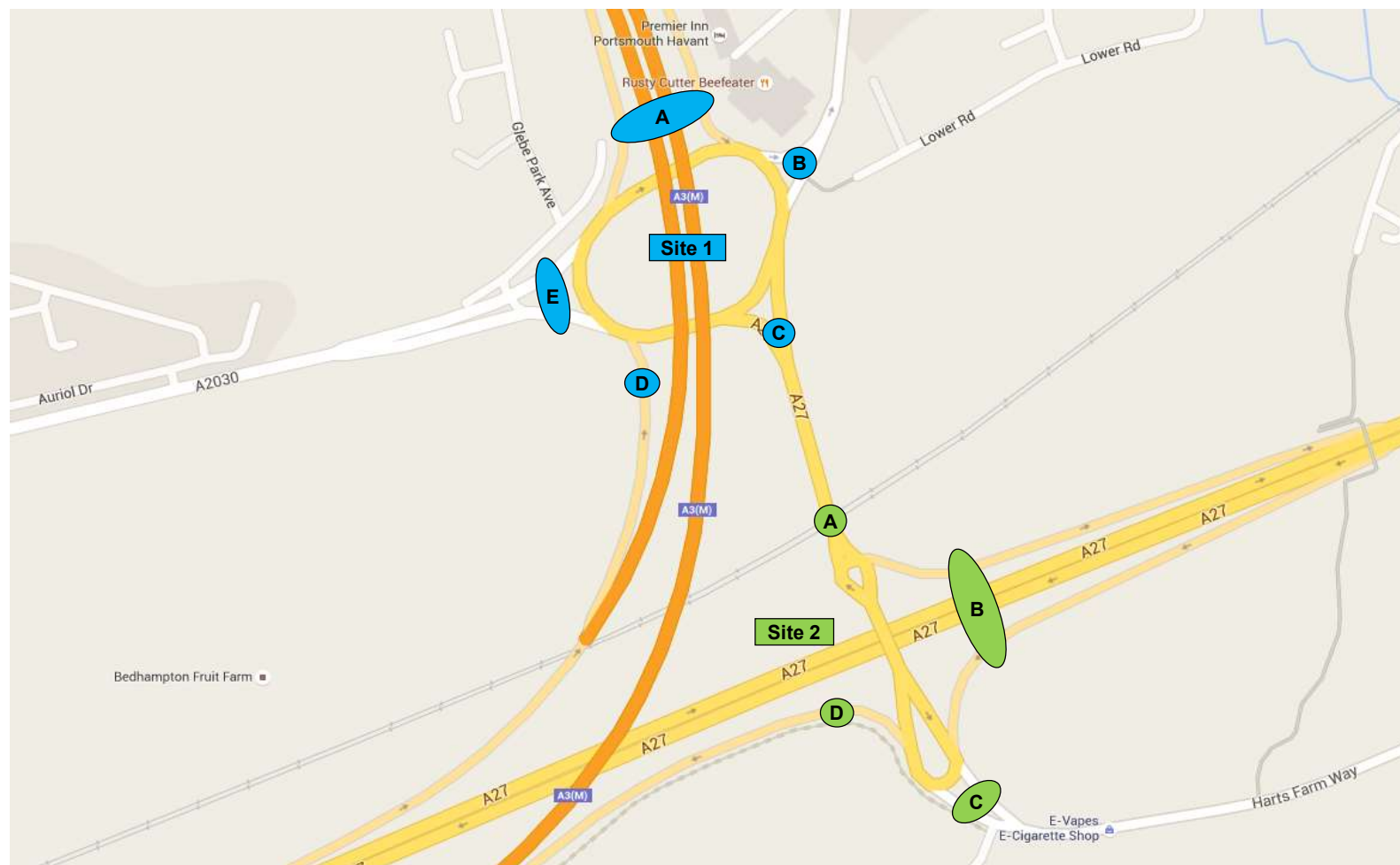
Incidents / Observations:

Client : Paul Basham Associates

Diagram: Overview

Project : 3259-LON-JB Bedhampton

Date : Tuesday 05 July 2016

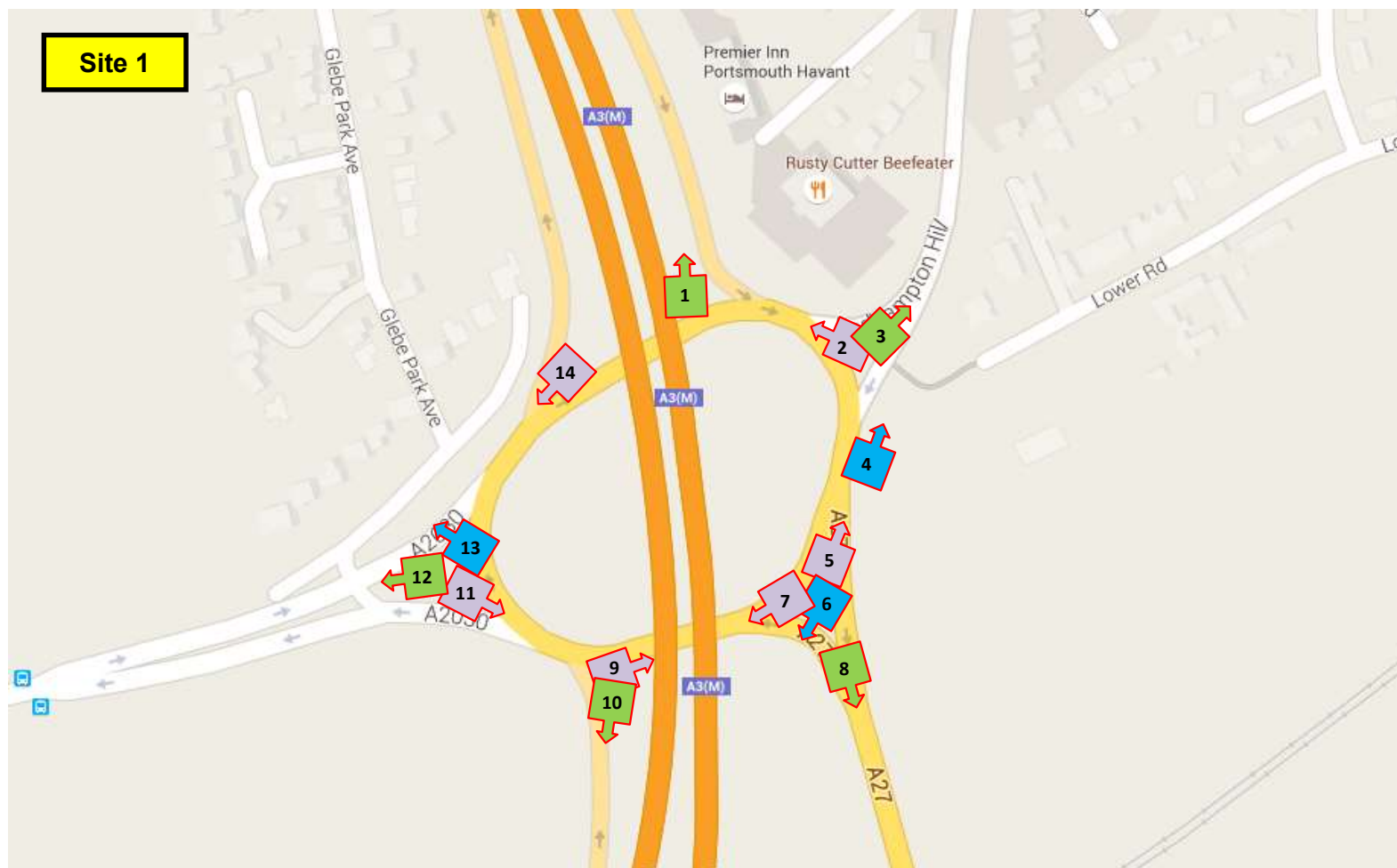


Client : Paul Basham Associates

Diagram: Site 1 camera locations

Project : 3259-LON-JB Bedhampton

Date : Tuesday 05 July 2016



Client : Paul Basham Associates

Diagram: Site 2 camera locations

Project : 3259-LON-JB Bedhampton

Date : Tuesday 05 July 2016





Client: Paul Basham Associates
Project: 3259-LCN-JB Bedhampton
Survey type: Queue length survey
Site: 1. Rusty Cutler Roundabout
Date: Tuesday 05 July 2016

Paul Basham Associates
3259-LON-JIB Bedhampton
Queues length survey
1. Rusty Cutter Roundabout
Twickenham, GB, July 2018

PCU Values						
CAR	LGV	OGV	OGV	P2V	MC	PC
1.0	1.0	1.5	2.3	2.0	0.6	0.2

PCQ values						
CAR	LQV	OGV	OGV	PSV	MC	PC
1.0	1.0	1.5	2.3	2.0	0.4	0.2

Queue lengths recorded at the start of each 5 minute interval.

[illegible]

Queue lengths recorded at the start of each 5 minute interval

[illegible]

Lane 3								Total	PCU Total	Arm C										Total	PCU Total					
CAR	LGV	OGV1	OGV2	PSV	MC	PC	CAR			LGV	OGV1	OGV2	PSV	MC	PC	Total	PCU Total	CAR	LGV			OGV1	OGV2	PSV	MC	PC
0	0	1	0	0	0	0	1	1.5	07:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	2	1	0	0	0	0	4	4.5	07:05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	3	0	0	0	0	0	3	3	07:10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2	3	0	0	0	0	0	5	5	07:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7	2	0	0	0	0	0	9	9	07:20:00	1	0	0	0	0	0	1	1	1	0	0	0	0	0	1	1	
8	2	1	0	0	0	0	11	11.5	07:25:00	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	
6	1	0	0	0	0	0	7	7	07:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8	2	0	0	0	0	0	10	10	07:35:00	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	
19	2	0	0	0	0	0	21	21	07:40:00	0	0	1	0	0	0	1	1.5	0	0	0	0	0	0	0	0	
14	4	1	0	0	0	0	19	19.5	07:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11	1	0	0	0	0	0	12	12	07:50:00	2	1	0	0	0	0	3	3	0	0	0	0	0	0	0	0	
8	0	2	0	0	0	0	10	11	07:55:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6	1	0	0	0	0	0	7	7	08:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4	0	1	1	0	0	0	6	7.8	08:05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9	1	0	0	0	0	0	10	10	08:10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5	3	0	0	0	0	0	8	8	08:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
19	1	0	0	0	0	0	20	20	08:20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
18	1	0	0	0	0	0	19	19	08:25:00	1	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1	
10	1	1	0	0	1	0	13	12.9	08:30:00	0	0	0	0	0	0	Total	0	0	0	0	0	0	0	0	0	
6	1	2	0	0	0	0	9	10	08:35:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7	1	1	0	0	0	0	9	9.5	08:40:00	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	
8	2	1	0	0	0	0	11	11.5	08:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4	2	1	0	0	0	0	7	7.5	08:50:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4	1	0	0	0	0	0	5	5	08:55:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5	3	0	0	0	0	0	8	8	09:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1	0	0	0	0	0	0	1	1	09:05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4	0	0	0	0	0	0	4	4	09:10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6	1	1	0	0	0	0	8	8.5	09:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6	3	1	0	0	0	0	10	10.5	09:20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	09:25:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1	1	0	0	0	0	0	2	2	09:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3	1	1	0	0	0	0	5	5.5	09:35:00	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	
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4	1	0	0	0	0	0	5	5	16:25:00	13	1	0	0	0	0	14	14	1	0	0	0	0	0	1	1	
5	1	0	0	0	0	0	6	6	16:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	2	0	0	0	0	0	2	2	16:35:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
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5	0	0	0	0	0	0	5	5	17:55:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	
2	0	0	0	0	0	0	2	2	18:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3	1	0	0	0	0	0	4	4	18:05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3	0	0	0	0	0	0	3	3	18:10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3	0	0	0	0	1	0	4	3.4	18:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	1	0	0	0	0	0	1	1	18:20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4	0	0	0	0	0	0	4	4	18:25:00	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	
1	0	0	0	0	0	0	1</																			